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ABSTRACT

A study by questionnaire attempted to identify the factors controlling the selection or non-selection of available resources in network-broadcast instructional television, and to identify the academic-administrative involvements of those officials--deans, chairmen, and teachers-making decisions on the use of instructional television. Those polled included twenty-six colleges, junior colleges and universities in the Nebraska Educational Television Council for Higher Education (NETCHE). The questionnaire investigated general attitudes toward ITV, the courses televised by NETCHE, and the supplementary instructional materials devised by NETCHE, and specific degrees of willingness to be involved in ITV programs. The results showed that the general use of instructional television is related primarily to its high quality when used as an adjunct to already established courses, and secondarily to the need to serve large numbers of students. No general continuum of attitudes according to academic position of those involved with selection of ITV use was identified. (BB)

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FINAL REPORT
Project No. 7-8071
Contract No. OEG-1-7-078071-3790

ORIENTATION TO INSTRUCTIONAL TELEVISION FOR FACULTIES OF HIGHER EDUCATION INSTITUTIONS BY NETWORK ETV IN NEBRASKA

Approved
Howard E. Tyler
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Orientation to Instructional Television for Faculties of Higher Education Institutions by Network ETV in Nebraska

A Study of Decision-Making for ETV Utilization

by M. Scheffel Pierce

The University of Nebraska
Lincoln, Nebraska

February 1969

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education and Welfare, Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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INTRODUCTION

In twenty years of instructional television a broad variety of applications has demonstrated the power of this medium to convey information. Time after time controlled studies have demonstrated that students who receive their instruction by television achieve on a par with students facing their instructor in a classroom. Parts of courses, whole courses, and entire curricula have been distributed primarily by television; closed-circuit, microwave, and broadcast transmission have been employed; signals have originated in basements, airplanes, submarines, mountain tops, and buses. Instructional television has proved its adaptability. And its viability.

Why, then, after twenty years is instructional television still only a wedge in the door of higher education? Why, when television's application to instruction has failed to displace faculties or to fall to the level of the innocuous entertainment of commercial television, has it not "caught on" with the academicians? Knowing the power of instructional television to present the close-up view of its subject matter, to show comparisons by split screen and superimposition, to visualize its content for the student, and to free instructors and administrators from time-bound class schedules why isn't there a rush to the door to bring television into the instructional environment?

In the report which follows an effort has been made to identify the factors which led to the selection or non-selection of available instruction by broadcast television among 26 colleges, junior colleges, and universities; and to identify the academic-administrative involvements or interactions which differentiate the roles of president, dean, department chairman, and teaching faculty in decisions concerning utilization of available televised instruction.

1. Background. For more than a decade Nebraska had one educational television broadcast station: KUON-TV, Channel 12, The University of Nebraska, Lincoln, Nebraska. In addition to serving the immediate area of Lincoln, KUON-TV relayed its programs to much of southeast and south central Nebraska by a series of translators. Within the coverage area thus formed several school districts allied themselves into a structure to plan, prepare, and utilize instructional broadcasts in subject matter for primary, intermediate, and secondary school classes. The resulting organization, The Nebraska Council for Educational Television grew rapidly and was successful in providing for instructional needs in such subjects as English, mathematics, and art. The demonstrated

achievement of KUON-TV in Southeastern Nebraska led to Statewide interest so that an Educational Television Commission was created by the Nebraska legislature and charged with the responsibility of developing a network of ETV stations to make educational programs available in all parts of the State.

With the emergence of plans for the development of a Statewide ETV network, several informal inquiries and discussions revealed that some of the colleges in Nebraska were interested in exploring the possibilities of receiving televised instruction. Late in the spring of 1965 the General Manager of the ETV network suggested a systematic investigation be initiated to determine the extent of interest among the college and university administrators for common instructional materials by television utilizing the resources of the network. The initial contact was made through the Coordinator of the State Normal Schools who expressed strong interest and arranged for presentation of the suggestion to the Board of Deans of the State colleges. The Deans indicated their interest also.

Subsequently through a series of visits with the presidents and deans of instruction and several staff members of colleges in Eastern Nebraska, it was established that among those contacted there was a unanimous wish to explore the potential of common utilization of instructional television programming for higher education. The presidents of all 24 institutions of higher education in Nebraska incorporated themselves as the Nebraska Educational Television Council for Higher Education, or "NETCHE". There was no precedent in any other state for such an organization wherein all higher education institutions - junior college, college, and university; public and private; large and small - had affiliated for the purpose of utilizing broadcast television to fulfill instructional needs. In addition to serving instructional needs, the unique all-inclusiveness of the NETCHE organization provided a notable opportunity to observe and study possible differences in the acceptance and application of broadcast televised instruction in classrooms of higher education.

2. Instructional Broadcasts. The first materials prepared and broadcast by NETCHE were presented during the period October-December, 1966, and consisted of 43 half-hour broadcasts designed to orient faculties to the potentials of instructional television for higher education. In the spring of 1967 a psychology course, leased from the University of Texas through the Great Plains National Instructional Television Library was broadcast for credit offerings by the member colleges, and a weekly "supplementary" lesson for support of instruction

in a variety of classes and courses was provided. A weekly newsletter to all faculty members of NETCHE institutions informed instructors and administrators about broadcast schedules, supplementary lesson topics and content, and invited responses to programs and for future directions.

For the fall schedule of 1967 NETCHE produced three new courses: 42 half-hour lessons in "Aesthetics: Understanding the Fine Arts"; 42 half-hour lessons in "Principles of Economics: Macroeconomics"; and 28 half-hour lessons in "Introduction to Modern Concepts of Mathematics". The "Introduction of Psychology" course of 28-45 minute lessons was leased again from the University of Texas through the Great Plains National Instructional Television Library.

During the same period but on a slightly different calendar from the credit course materials, two half-hour supplementary lessons were broadcast each week. Below are the topics which were included and the academic speciality which each was intended primarily to supplement, or the speciality from which the topic was drawn to supplement less specialized areas of learning:

Dead Sea Scrolls (Egyptology)
The Map Coloring Problem (Topology)
Smallpox and the American Indian (Anthropology)
Silversmithing (Art)
Molecular Orbital Valence Bond Theories (Advanced Chemistry)
The United States Supreme Court and Civil Liberties (Political Science)
Rehabilitation Practices with Juvenile Delinquents (Criminology)
Colleges and Freedom of Information (Journalism)
Micro-Teaching (Education)
Modular Scheduling (Education)
What Is The Goal of Studies in Theoretical Physics (Physics)
Physiologic Effects of Air Pollutants (Physiology)
The Scientist and His Culture: Assimilation of Isolation (Philosophy of Science)
Why Study Philosophy? (Philosophy)
Introduction to Chinese Poetry (World Literature)
Crop Damage from Storm and Hail (Agricultural Economics)
Major Categories of Computers (Computer Sciences)
Fine Arts in a Technological Age (Fine Arts)
An Introduction to Gamma Ray Spectroscopy (Nuclear Physics)

Themes of Contemporary Latin American
Literature (International Studies)
Issues and Unities in a Dual Education
System (Philosophy of Education)
Ethics in Advertising (Advertising)
The Harp (Music)
New Techniques and Technology in Education
(Education)
The Short Story (English)
An Interview with Katherine Anne Porter
(American Novel)

For each supplementary lesson broadcast, an effort was made to find the most highly qualified person to present the topic; or, in some cases, the specific topics were determined by a noted specialist whose expertise was desired by NETCHE instructors.

The involvement of both faculty and administration in the selection and development of NETCHE instructional materials is relevant to the measurement of the impact which televised instruction may have had in Nebraska's higher education. NETCHE's membership consisted of the presidents of all of the institutions of higher education in the State (24 when NETCHE was incorporated, later 26) and the general manager of the Nebraska Educational Television Network. The membership established the annual budget and influenced the determination of number and types of lessons and courses to be offered. The policies of NETCHE were established and governed by a board of directors of nine of the members; but the more detailed decisions were recommended by a Planning Board of persons appointed by each of the members of NETCHE. Most of the representatives on the planning board were academic deans, deans of administration, business managers, or others with major administrative responsibility in their respective colleges or universities.

In the selection of courses to be broadcast, the first step was a notice in the Newsletter for faculty members to suggest their preferences to their representative to the Planning Board, or the President, or directly to the NETCHE office. The Planning Board reviewed the requests plus their own suggestions as administrators and selected several courses to recommend to the Board of Directors. Once approved, each course area was announced and each member institution was invited to send representatives to a meeting, or series of meetings, to determine the general description of the course and to nominate instructors to teach it, or otherwise to establish a selection procedure. The representatives who attended these meetings were academic deans, department chairmen or faculty

members with a direct interest in the course to be offered. The candidates who ranked highest in preference were invited to prepare a sample lesson for an audition, and were recorded. Their academic competence having been determined by the first stage of the selection process, their television competence was evaluated by a team of instructional television specialists. With this information a selection was made.

The television instructor was invited to meet with all interested NETCHE representatives prior to the beginning of recording of the lesson series. Further, as part of the contract, each television instructor was required to visit the campus of each NETCHE school using the televised course during the first semester it was offered.

For the supplementary lessons, suggestions for topics and nominations for instructors were solicited from all faculty members in NETCHE schools. A committee of the Planning Board narrowed the list and selected general academic areas to be served, but the NETCHE administrative staff was delegated the final responsibility of matching instructors with specific topics in most cases.

By the fall of 1967 each faculty member and academic administrator in the colleges and universities of Nebraska had had an opportunity to become familiar with the sharing of instruction by broadcast television. This opportunity was considerably amplified during the period of September 1967 to January 1968. The Newsletter, meetings, campus visitations, and the broadcasts themselves made an abundance of information available.

3. Utilization. When NETCHE was organized, only four of the twenty-four colleges and universities had any facilities for utilizing television broadcasts for instructional purposes. By the fall of 1967 at least 16 of the schools were equipped to receive NETCHE broadcasts for instructional use, and most of the others were making some sort of temporary arrangements for suitable reception. Most of the areas of the State were covered by an ETV signal which could be viewed by faculty members in their homes or by students in dormitory lounges in addition to whatever classroom reception was provided. Apparently viable instructional programs were available, and the distribution was broad; academic staffs were well informed; and the potential users of the telecast lessons had been involved in the planning and development of the materials. It would seem that the use, or non-use, of NETCHE materials at this point could be a harbinger for the future, not only in the development of NETCHE but for the acceptance or value-judgments of televised instruction in general among institutions of higher education.

The Problem. Knowing that instructional materials were available by broadcast television, and knowing that faculty deliberation was integral in the choice of materials, the extent to which the broadcast instructional units or series were employed must reveal -- among other factors -- the attitudes of faculty and administration toward broadcast instruction by television. In the early stages of NETCHE's development the degree of acceptance and the rationale which might provide keys for increasing utilization were crucial to the plans for future development of the organization. Similarly, the information revealed through the NETCHE experiences may influence decisions to formulate similar systems for sharing instruction by television in other states or regions.

Among the questions which seemed most profitable to explore in order to obtain quantifiable, valid answers applicable to the future development of systems of instruction by television for higher education were these:

1. What are the perceived values of sharing instruction by television?
2. Which are perceived to have the greatest utility to higher education: complete courses by television, or occasional lessons to supplement on-campus instruction?
3. Are there differences in attitudes toward televised instruction among presidents of colleges, academic deans, department chairmen, and teaching faculty?
4. What decision-making processes are involved in determining whether or not to use the instruction available by television?
5. Does the degree of involvement in instructional television planning affect the readiness to use the product?

All of these questions bear on a central query relevant to higher education instruction by television:

> What are the factors which influence the choice between acceptance and rejection of available instruction by television among the academic decision makers in institutions of higher education?

Method. A questionnaire study was employed to gather data relevant to the purposes of this investigation. It was pretested for clarity and sufficiency by submitting it to a small number of faculty members and advanced graduate students at hand, then with minor changes was submitted to the sample groups.

1. The Questionnaire.[1] An open-ended questionnaire was developed which was divided into four main parts: general attitudes toward instructional television, the courses televised by NETCHE, the supplementary instructional materials televised by NETCHE, and specific degrees of willingness to be involved with instructional television. Thus the questionnaire proceeded in line from general topics to the specific and narrow categories. In each of the four categories the first question dealt with utilization of televised materials, and the other questions explored attitudes, the decision making process, and involvement or personal commitment.

In order to assure comparability of responses from various strata of the professional academic structure, the questionnaire was devised to be equally appropriate for response by faculty member, department chairman, academic dean, or president.

The questionnaire was purposely kept brief (13 questions) to encourage full replies; it was clearly partitioned to focus on each category separately; and a variety of type was employed for both emphasis and visual interest.

2. The sample. The questionnaire was mailed to all twenty-six presidents who were members of the Nebraska Educational Television Council for Higher Education at the time the survey was made. The dean of instruction (or equivalent administrator) at each institution also received a questionnaire, as did the chairman of each department offering a course parallel to one broadcast by NETCHE. Of all the remaining faculty (including department chairmen) a random sample of 10% of the total received questionnaires. The lists of faculty members were drawn from the latest published catalog of each of 25 schools and from a list prepared as an accurate interpretation of full-time equivalent faculty by the Director of Institutional Research at the University of Nebraska. Randomization was developed according to tables from Edwards.[2] Undeliverable questionnaires returned to NETCHE were re-addressed to other faculty members also randomly drawn.

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1. See Appendix A

2. Edwards, A.L. Experimental design in psychological research. New York Rinehart, 1950

All non-respondents received a second copy of the questionnaire with a new cover letter. A sampling by interview of 5% of those still not responding was planned based on findings from the respondents, but, as explained (infra) in the Procedures section, that number was reduced.

The total sample surveyed consisted of 26 presidents, 37 deans, and 93 department chairmen, and faculty members numbering 269.

3. Procedures. The 425 questionnaires were mailed to the sample group on February 1 and 2, 1968, and 33% were returned by February 14. The next mailing (to the non-responding 77%) was out on February 15 and 16. By March 1, 1968 a total of 177 returns had been received for a total response of 42%. The experimental design had anticipated a personal interview of 5% of those remaining in the category of non-respondents after March 1, giving an actual interview sample of 12 subjects. It was also intended to partition the interviews in approximation of the significantly different parts of the data-break on academic positions of respondents. Academic position analyzed as to number of returns of March 1 provided a X^2 significant at α=10%. The president and faculty categories were farthest apart, and they accounted for the X^2 value. Two presidents were interviewed, as planned; but only 3 faculty members of 22 who were contacted acceded to interviews. The others generally indicated non-involvement in either utilization or decision making affecting instructional television. The 5 interviews were conducted during the period March 4 through March 8, 1968.

4. Analysis techniques. The data collected were not natural, having been generated by this study rather than discovered ex post facto; thus a coding is required rather than a formal content analysis. Coding categories have been drawn from attitudes identified with utilization of television for instruction in higher education: interactional social pressures, quality concerns, enrollment pressures, economic concerns, attitudes of experimentation, and administrative concerns. A category was constructed for attitudes evolving from an identification with the Nebraska Educational Television Council for Higher Education, and an "Other" category for otherwise unclassified responses which, however, was unused in the eventual coding.

Data-breaks were established for large/small schools, for public/private control, and for academic position (president/dean of instruction/chairman of department/teaching faculty). The break between large and small schools was established as the faculty number for the median of the NETCHE schools ranked in order of size.[3] The

3. The actual break in the faculty size was reflected in the sample size of 7 for the median school, or an actual faculty size of approximately 70.

determination between public and private control was drawn directly from the college catalog of each participating institution, with 12 being identified as public and 14 as private. The academic positions were also identified from listings in the catalogs and from the NETCHE membership list for presidents; the academic dean being identified as the president's principal administrator for academic matters; the department chairmen being selected from catalog listings of departments which appeared to be appropriate to the granting of credit for courses offered by NETCHE; and all other faculty being interpreted as teaching faculty in the analysis.

To provide comparability of data among the several categories, all data are interpreted as percentages of the sample part. For absolute mumbers information, the product of the percentage and the frequency for a given item will reveal the actual number of respondents.

The analysis model items generated responses also indicating strength and direction of attitudes. These are coded serially on a five point scale with 5 as strong-positive, 3 as neutral, and 1 as strong-negative.

The open ended form of the questionnaire requires a measure of realiability in the coding of responses. This has been provided by a realiability check between two coders on twenty questionnaires. In all instances there were no differences between the coders on factor coding and no differences in directionality on serial coding. In the few discrepancies of serial coding (most of which were differences between five and four or between one and two), new guidelines for coding to cover these differences were created and effectively eliminated the discrepancies. The remaining questionnaires were then coded only once. The two coders also conducted and coded the non-respondent interviews.

RESULTS AND DISCUSSION

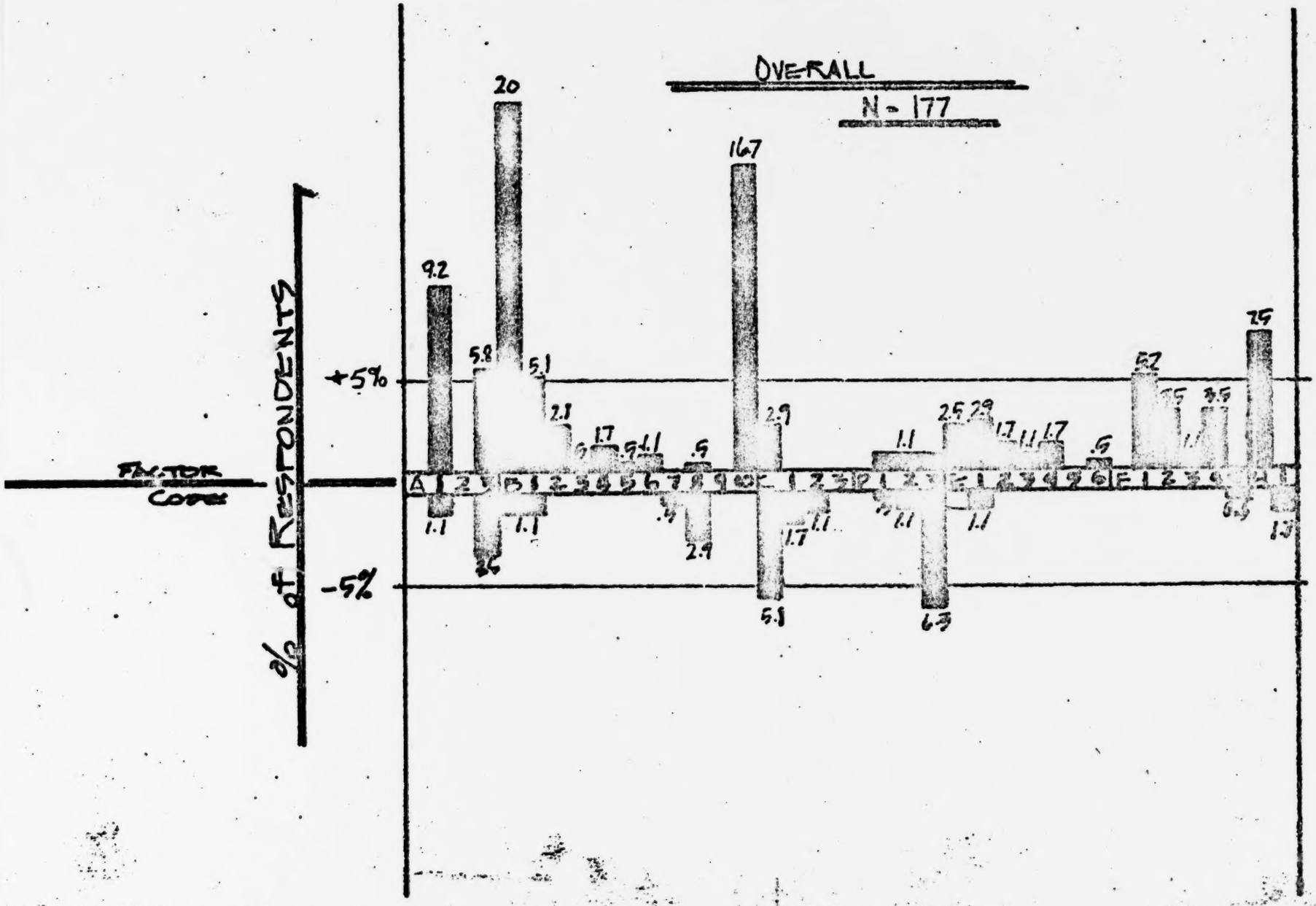
1. General. The total number of respondents to the questionnaire was 177. In the factor coding each factor was independent, and a response which referred to the general factor category may, in some cases, have been insufficiently explicit to be coded in a sub-category; thus, the overall category total sometimes does not equal the summation of the sub-category factors. Also a consequence of the independence of the factors, one respondent may list several factors on one answer so that again $\Sigma \neq 100\%$.

Responses were received from 139 persons, or 33% of the total sample group (425) from the first mailing of the questionnaire. An additional 9% (38) of the sample were returned after the second mailing. A summary analysis of the second group of returns showed no differences from the first group, and the data from both groups were combined to produce the total N of 177.

A chi-square test was performed on all data-breaks for the returns. Only academic position nears significance at the α=10% level, so the extremes of this group (president and teaching faculty) were utilized for interviews of non-respondents after the second mailing of the questionnaire. According to the design, 5% (N=12) of the non-respondents were to be interviewed. Two presidents (the number desired) and three faculty members (10 were intended) agreed to the interviews out of a total of 24, or 10% of the non-respondents, who were called. Those who refused the interviews (all faculty members) claimed non-involvement with utilization of instructional television or decision making concerning it. Summary analysis of the interview results show consistency with the rest of the group except for the relative non-importance of the interviewed faculty members in decision making, but this group was not included in the total sample in reporting results of this study since they occurred after the March 1, closing date for responses included in the full analysis.

All data given below are reported in percentages in order to be directly comparable. The percentages refer to portions of the total sample of persons who responded to the questionnaire by the March 1, 1968 deadline (N=177); further, the percentages provided a consensus measure since they refer to the number of persons in the sample who identified specific factors. 5% consensus was chosen as a point determining significance since this appears to be a meaningful dividing point between near zero consensus and the factors which bring out larger consensus.

I-A: 9


OVERALL
N = 177
+5%
-5%
% of Respondents
Factor Codes
9.2
20
5.8
5.1
2.1
1.7
1.1
.5
16.7
2.9
1.1
2.5
2.9
1.7
1.1
1.7
.5
5.7
3.5
7.9
1.1
1.1
2.9
1.7
1.1
1.1
1.1
6.3
1.1
6.3
5.1
1.1
2.6
1.1
.4
2.9
A 1 2 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 E 1 2 3 4 5 6 F 1 2 3 4

Data-break percentages refer to portions of the complementary sample parts, as follows:

N (large)=149 respondents
N (small) = 28 respondents
N (public) = 108 respondents
N (private) = 69 respondents
N (presidents) = 9 respondents
N (academic deans) = 19 respondents
N (interested chairmen)= 45 respondents
N (teaching faculty) = 104 respondents

The questionnaire format is followed in reporting the data with emphasis on data presentation forms for best visibility of range and comparability. Factors are identified on a bipolar scale as (+) if they support instructional television utilization or (-) if they oppose it.

2. Questionnaire. Under the category of "Instructional Television, General" (identified as I in this report) the first question asked was "A. If you have considered television as an educational medium for use in your institution or department, what situation (or situations) caused you to do so?" (See Figures I-A:a, b, and c).

The analysis of the total sample of respondents in terms of the bipolar code had the following ranges for the overall factor levels:

\+ 0-20%
\- 0-6.3%

Two positive factors, B (quality concensus, general) and B-10 (quality concerns: supplementary instructional materials), showed more than 15% consensus. Five factors - A-1,A-3, B-1, F-1, and H, exeeeded 5% but less than 15%. The negative factor levels of most importance were C and D-3, the only ones which exceeded 5%.

Thus, the general use of instructional television as provided by NETCHE appears to rest most heavily on concerns for quality education. The role of supplementary instruction programming is especially prominent in this concern.

Of secondary importance for ITV utilization but somewhat more important, collectively, than those factors which act to suppress it are the needs to serve large numbers of students presently enrolled, augmenting a faculty with insufficient capable instructors

available to meet present enrollment pressures, the need to expand course offerings, pressures from other academic levels, and the presence of NETCHE as a source of materials for the member institutions. All of these except possibly the faculty load pressure and the presence of NETCHE are directly related to concern for giving students a quality education. Evidently the movement toward utilization of ITV relates to maintaining or improving educational quality despite increased enrollments and adequacy of the faculty to handle all the courses they would like to offer.

Within the same level of importance but serving to mitigate using instructional television are the factors of cost of TV utilization and a lack of plans to offer the courses provided by NETCHE.

Ranges in the data-breaks are as follows:

	Public	Private
+	0-19%	0-19%
-	0-6.5%	0-7.3%

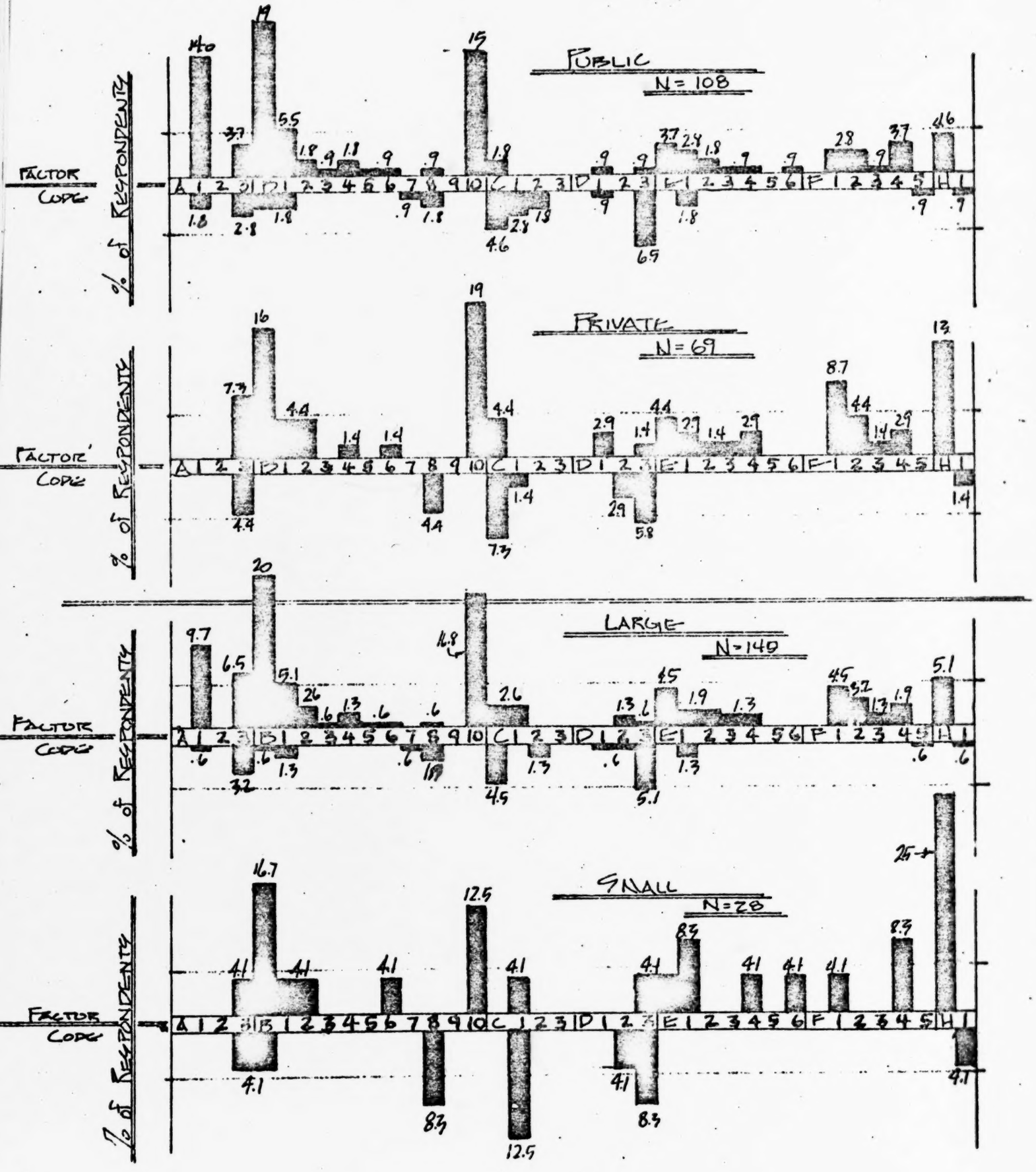
	Large	Small
+	0-20%	0-25%
-	0-5.1%	1-12.5%

	Pres.	Deans	Chmn.	Faculty
+	0-22.2%	0-58%	0-20%	0-14.4%
-	0-11.1%	0-10.5%	0-8.9%	0-8.7%

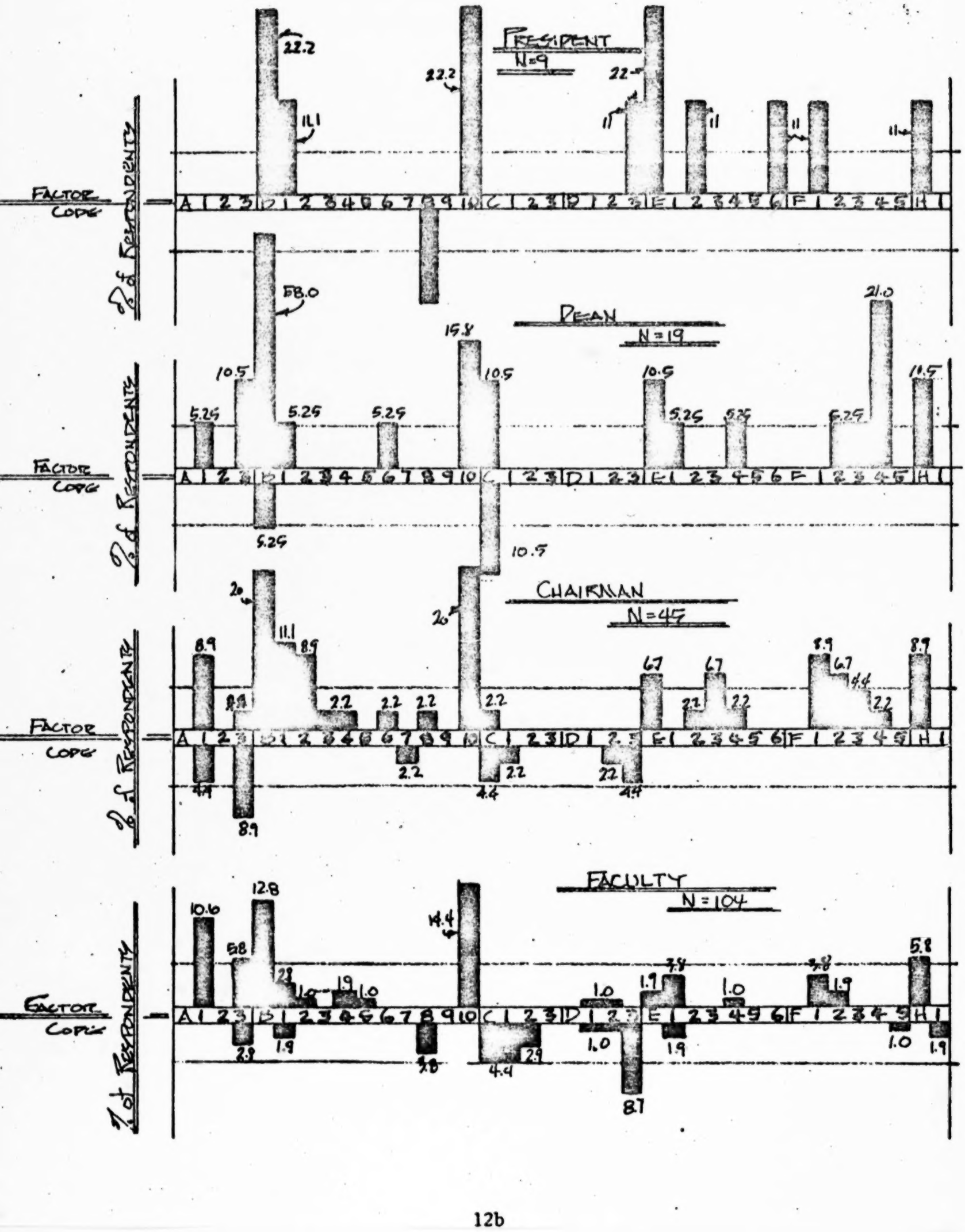
All of the data-breaks show the same general pattern as that of the overall analysis, although certain differences do emerge. Public colleges are more likely to use NETCHE in response to the need to serve more students than are the private colleges. Private colleges are more likely to use NETCHE because of academic pressure from faculty members and because it is available than are public colleges. Large colleges also utilize ITV more in order to serve large numbers of students than do the small colleges, while the small colleges are more likely to build on their past experience with instructional television, to build prestige, and to take advantage of the existence of NETCHE. The small colleges found ITV utilization inconsistent with their philosophy of education more frequently (proportionately) than the large colleges, and were more often hampered by lack of electronic equipment.

In relationship to academic position, all four categories showed concern for quality instruction with the deans showing the highest percentage of reference to this general category, the

I - A : b


PUBLIC
N = 108
PRIVATE
N = 69
LARGE
N = 149
SMALL
N = 28
% of RESPONDENTS
FACTOR CODE

I-A:C


PRESIDENT
N=9
DEAN
N=19
CHAIRMAN
N=45
FACULTY
N=104
% of Respondents
Factor Code
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1

presidents and department chairmen next, then the teaching faculty but still at a significant response level (12.8%). All groups responded strongly positive to the factor of the supplementary lessons as contributing to the quality of instruction. The presidents expressed the value of expermientation with the television medium as a positive factor more often than the deans and chairmen, and the factor was not significant for faculty. In reverse order of concern was the significance of the number of students to be served (enrollment pressure) which was mentioned most often by faculty, next by chairmen, then by deans, and did not appear in the responses of the presidents. Other significant differences in the positive scales can be noted from Figure II-A:c. On the negative scale only one significant response is noted for the presidents, two for the deans, and one each for chairmen and faculty - each of these for a different factor, the presidents because of their educational philosophies, the deans questioning the instructional quality with significant frequency and with concern for the costs of ITV. Chairmen appear to have sufficient staff available without TV, and the faculties have no concern with courses offered by NETCHE. The significant negative factors reported for the deans are also significant positive factors for this same sub-category. Perhaps the most distinctive comparison between the presidents and the other sub-categories is the absence of reference to enrollment pressure factors by the presidents. The deans expressed the only significant percentage for the public relations value of ETV and for the prestige effect of the broadcast instruction. Department chairmen were the only grouping noting a significant value for the availability of superior instructors by television, and were the only ones mentioning the value of related literature with the orientation toward experimentation.

The next question under the major heading of "Instructional Television, General" asked: "B. Was the decision concerning utilization influenced by the support or opposition of administration, faculty, students, board, parents, or others? How important do you feel this influence was?" The failure of the sum of percentages in Figure I-B:a to equal 100% indicates that not all respondents to the questionnaire answered this question. The only notable difference in the data-breaks is for academic position. About 60% of all those with administrative responsibilities admitted to outside influences, but only 25% of the faculty respondents did so. All of the presidents who responded to this question admitted to outside influences affecting their decisions concerning ITV utilization. Figure I-B:b (part 1) indicates the sources of influence, in four categories, reported by respondents over-all and by data-breaks. This same figure also reports the strength of the various sources of influence on ITV utilization decisions and shows

I-B:a

	OVERALL N=177	PUBLIC N=108	PRIVATE N=69	LARGE N=149	SMALL N=28	PRESIDENT N=9	DEANS N=19	CHAIRMAN N=45	FACULTY N=104
YES	41.4	38	49	40	48	56	58	69	25
NO	16.7	17	14	17	7.5	0	16	16	19

NOTE: FIGURE IS THE PERCENTAGE WHICH WERE INFLUENCED, BY QUESTION

I-B:b

	OVERALL N=177	PUBLIC N=108	PRIVATE N=69	LARGE N=145	SMALL N=28	PRESIDENT N=9	DEAN N=19	CHAIRMAN N=45	FACULTY N=104
ADMINISTRATION	31 / 11	24 / 6.4	41 / 16	30 / 11	41 / 13	45 / 22	42 / 32	56 / 13	18 / 5.7
FACULTY	25 / 6.3	21 / 5.5	23 / 4.4	23 / 6.3	19 / 7.4	33 / 22	37 / 26	33 / 2.0	14 / 2.9
STUDENTS	5.6 / 0.6	4.6 / 1.0	7.3 / 0	5.5 / 0	7.5 / 3.7	11 / 0	0 / 0	8.9 / 0	4.8 / 1.0
BOARD	2.8 / 0	0 / 0	8.7 / 0	2.8 / 0	3.7 / 0	11 / 0	0 / 0	11 / 0	0 / 0

NOTE: CELLS: TOP-LEFT OF DIAGONAL REFERS TO SCORE INDENTIFIED BY THOSE ANSWERING "YES" IN I-B:a. BOTTOM-RIGHT OF DIAGONAL REFERS TO PERCENTAGE OF THESE PERSONS WHO FELT IDENTIFIED SOURCE OF INFLUENCE TO BE A STRONG ONE. (4-5 ON 5 POINT SCALE: VERY IMPORTANT TO NOT IMPORTANT)

the greatest influence to come from the administration. The presidents report an equally strong stimulus from the faculty.

The nature of the influence felt from administrative sources as reported by the academic position data-break (Figure I-B:b, part 2) shows that for each level the major favorable influence was for instructional qualtiy while the major unfavorable influence was an economic factor. Influences felt from faculty sources were significant for large schools and for private schools for quality concerns, for the quality benefits of the supplementary lessons for small and private schools, and to "wait and see" for the small schools. Figure I-B:c (part 2) shows that the faculty influenced the administrative ranks and other faculty members to utilize ITV for instructional quality, but equally influenced the deans not to use ITV for the same rationale. The faculty significantly influenced presidents and deans and other faculty members away from televised instruction on the basis of concerns for educational philosophy.

None of the academic positions indicated any significant influence on television utilization decisions coming from either the institution's policy board or from students.

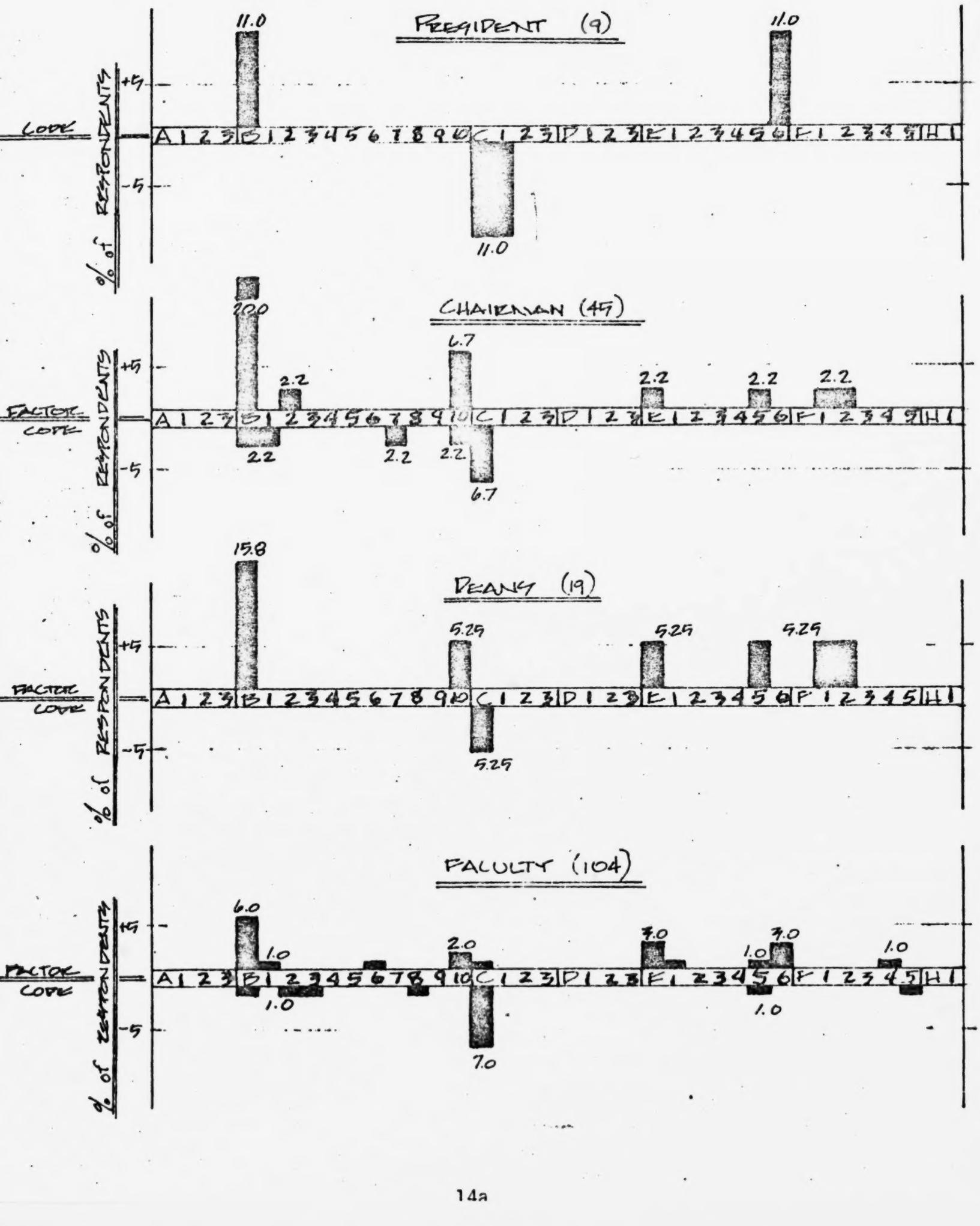
The third question in the classification of "Instructional Television, General" was "C. What do you estimate to be the present attitude towards the utilization of instruction (sic) television of your administration, of your faculty, or your students? What do you feel are the major reasons for their opinions?"

On a 5-point scale ranging from -2 through 0 to +2, all respondent categories (consequently also the over-all) projected a moderately favorable attitude toward ITV by administration and faculty (Figure I-C:a). Student attitudes were interpreted as more positive than negative by all respondent groups, but in almost all instances student attitudes were projected as more neutral than administration or faculty attitudes.

Figure I-C:a also displays the rationale attributed to the attitudes which were projected to others. General quality concerns were the prevalent reasons believed to explain positive attitudes, and the costs were believed to explain negative attitudes. In the data breaks (Figures I-C:b, c, and d), reasons attributed to administrators of small schools for both favoring and opposing instructional television are similar to, but more emphatic than for administrators of larger institutions. One notable contrast occurs in that small college administrators are believed to be more actively involved in ITV than their counterparts in the larger schools. Differences between public and private schools are

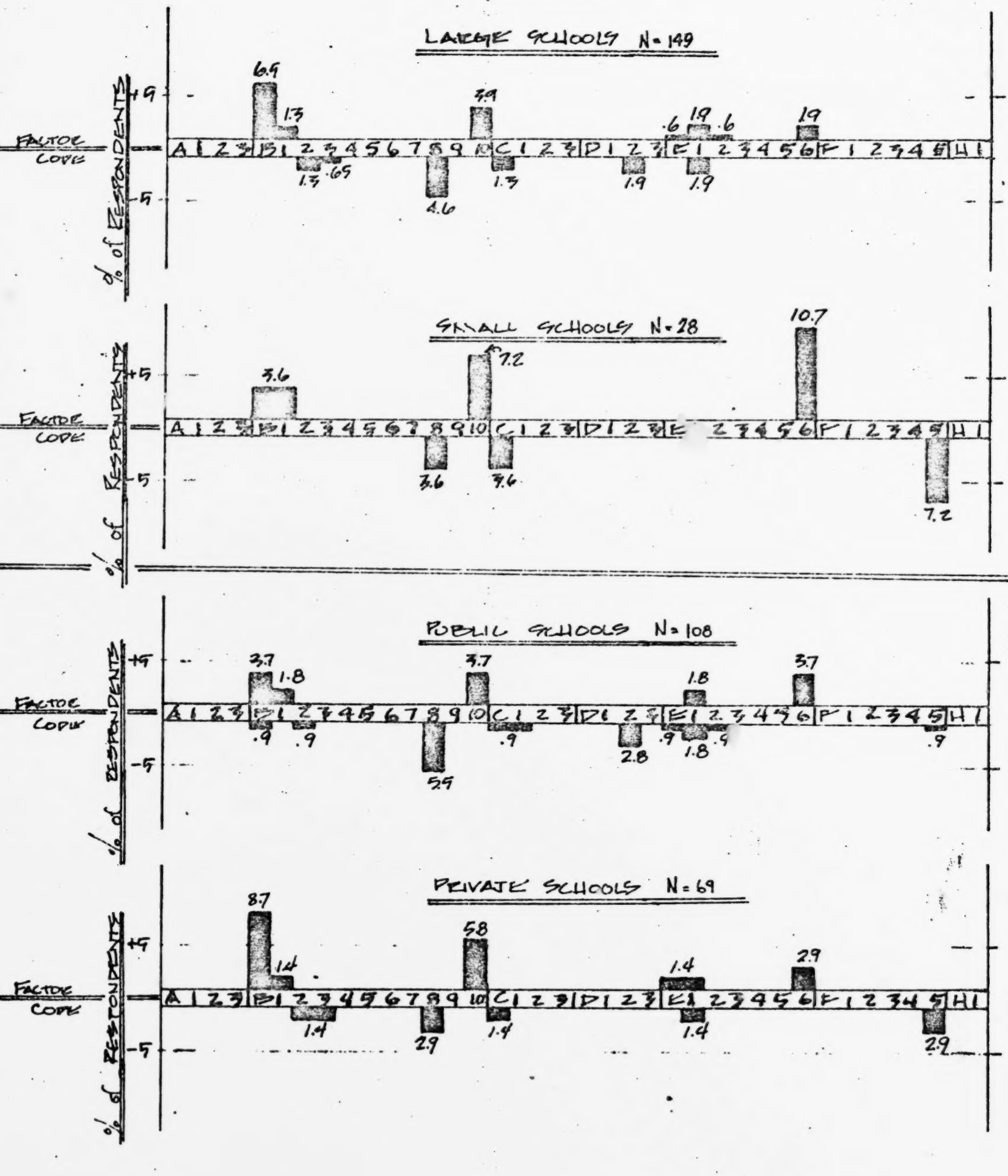
I-B : b (PART 2)

ADMINISTRATION



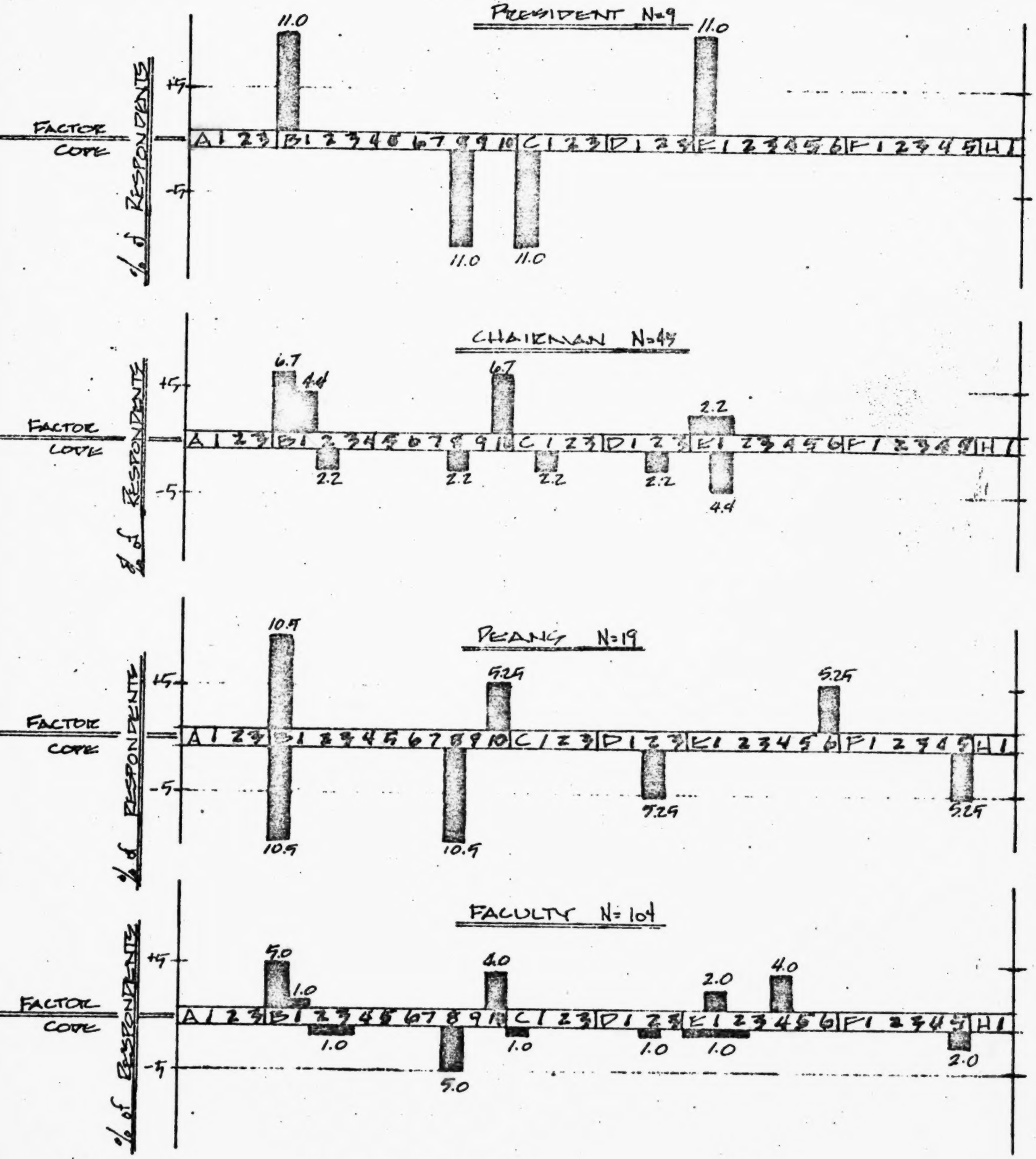
I-B:C (PART 1)

FACULTY


LARGE SCHOOLS N=149
SMALL SCHOOLS N=28
PUBLIC SCHOOLS N=108
PRIVATE SCHOOLS N=69
FACTOR CODE
% of RESPONDENTS
+5
-5
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1

I-B:C (PART 2)

FACULTY

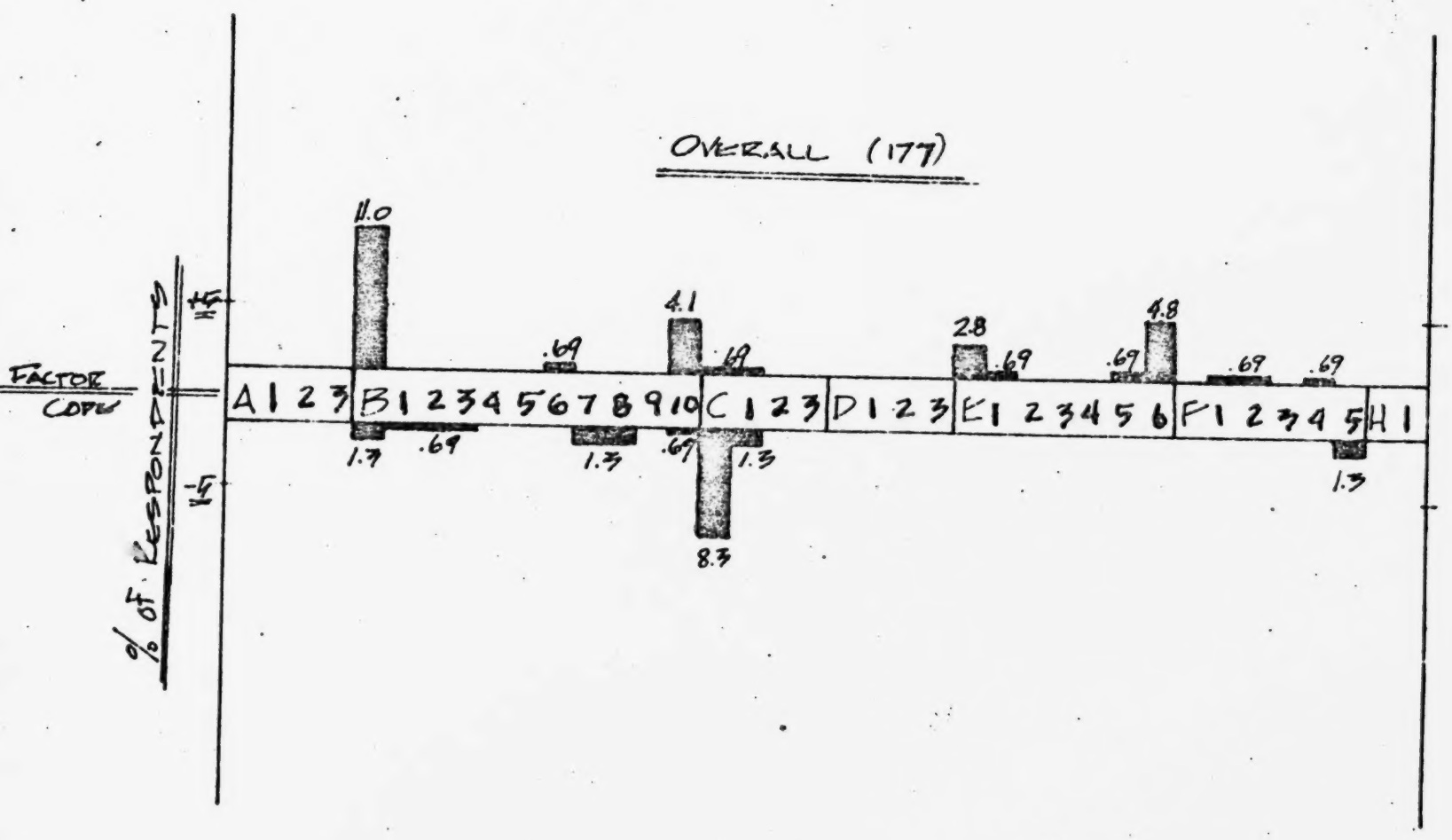


I-C:a

ATTITUDE

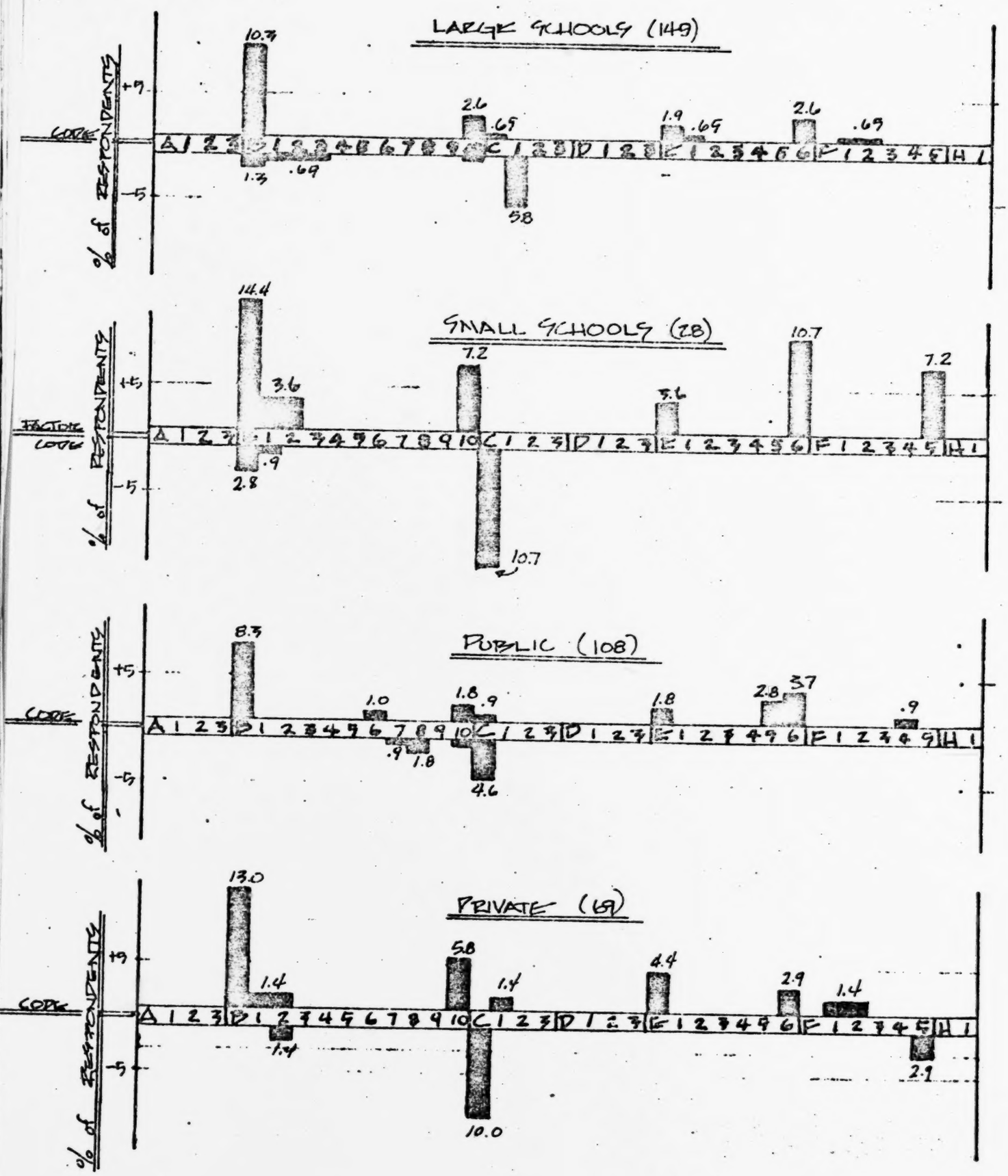
		Overall (177)	Large (149)	Small (28)	Public (108)	Private (69)	President (9)	Chairman (45)	Deans (9)	Faculty (104)
Administration	+2	9	7.1	10.7	7.5	8.7	11.1	8.9	19.8	6
	+1	46.8	45.4	32	28	48	22.2	51.1	52.5	27
	0	10.6	7.8	17.9	8.3	8.7	11.1	8.9	10.5	8
	-1	3.5	4.5	0	6.4	1.4	0	4.4	0	5
	-2	0	0	0	0	0	0	0	0	0
Faculty	+2	3.7	2.6	3.6	2.8	2.9	11.1	4.4	0	2
	+1	31.1	28.4	32	22	42	22.2	49	58	18
	0	17.2	14.2	21.6	16	16	11.1	22	10.5	15
	-1	7.0	10.3	0	12	4.4	0	6.9	15.8	10
	-2	0	0	0	0	0	0	0	0	0
Students	+2	1.2	1.9	0	1.8	1.4	11.1	0	0	2
	-1	21.6	17.4	29.2	19	29	11.1	33	36.8	14
	-0	17.8	16.8	17.9	17	19	11.1	33	31.6	11
	-1	7.5	5.8	0	6.4	2.9	0	6.7	0	6
	-2	.8	1.9	0	1.8	0	0	2.2	0	1

NOTE: FIGURES IN %



I-C:b (PART 1)

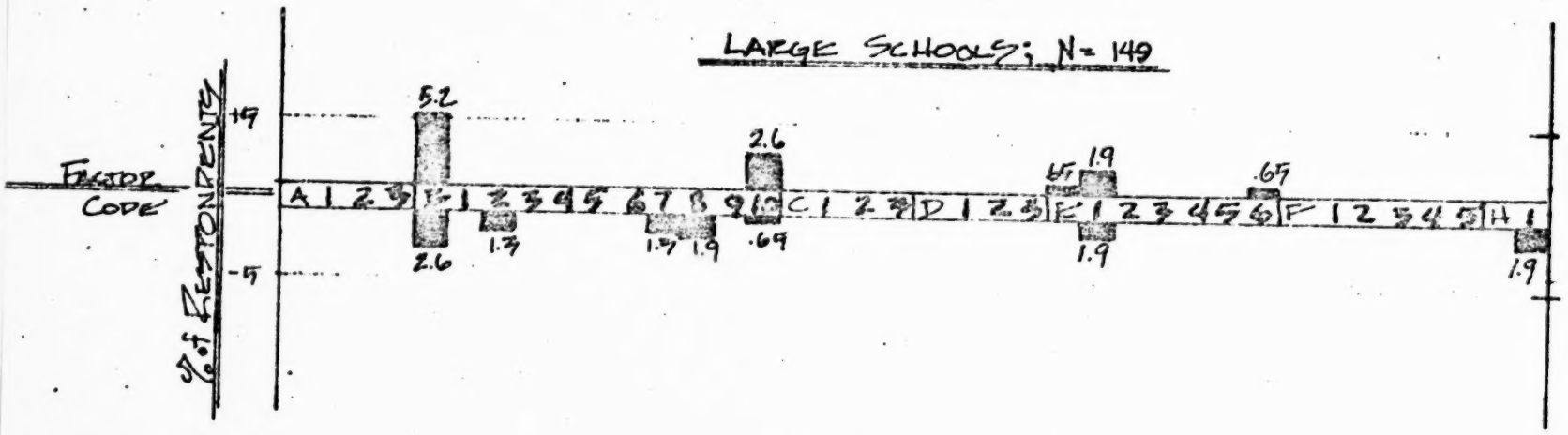
ADMINISTRATION



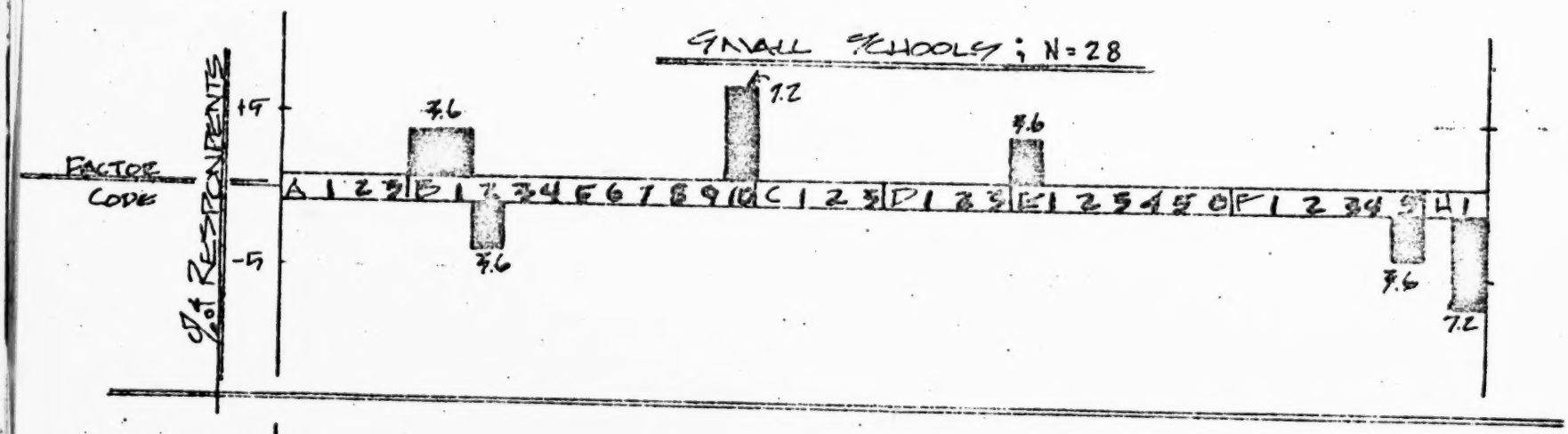
I-C:d (PART 1)

STUDENTS

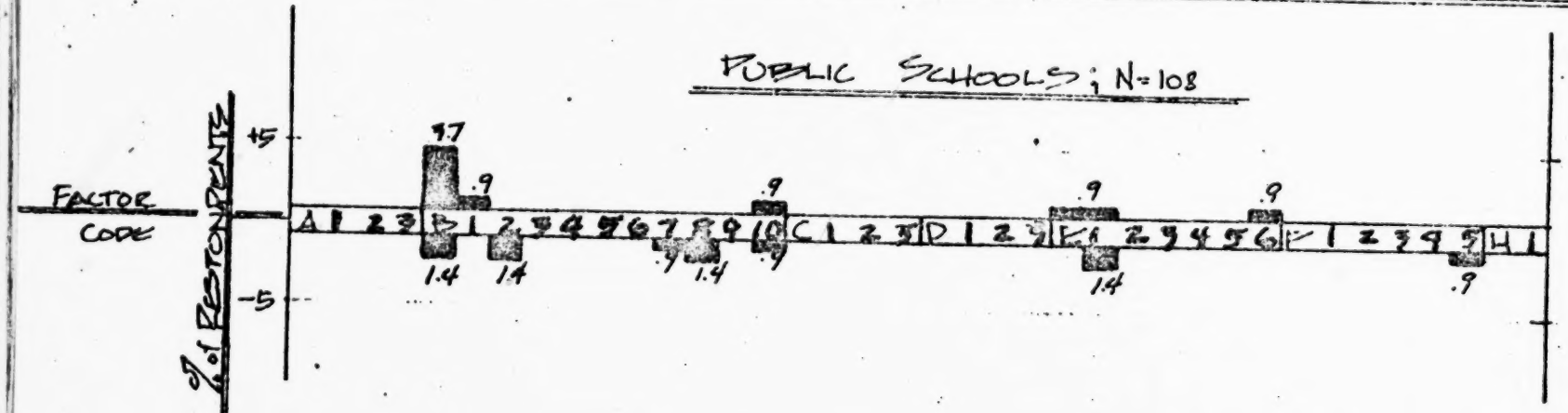
LARGE SCHOOLS; N = 149



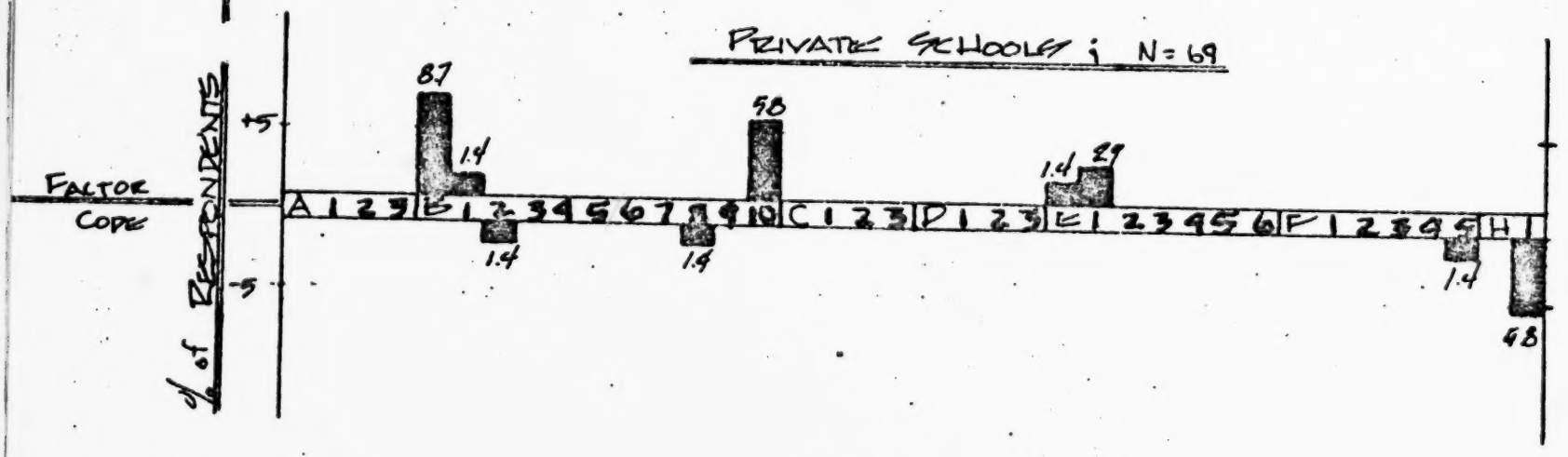
SMALL SCHOOLS; N = 28



PUBLIC SCHOOLS; N = 108



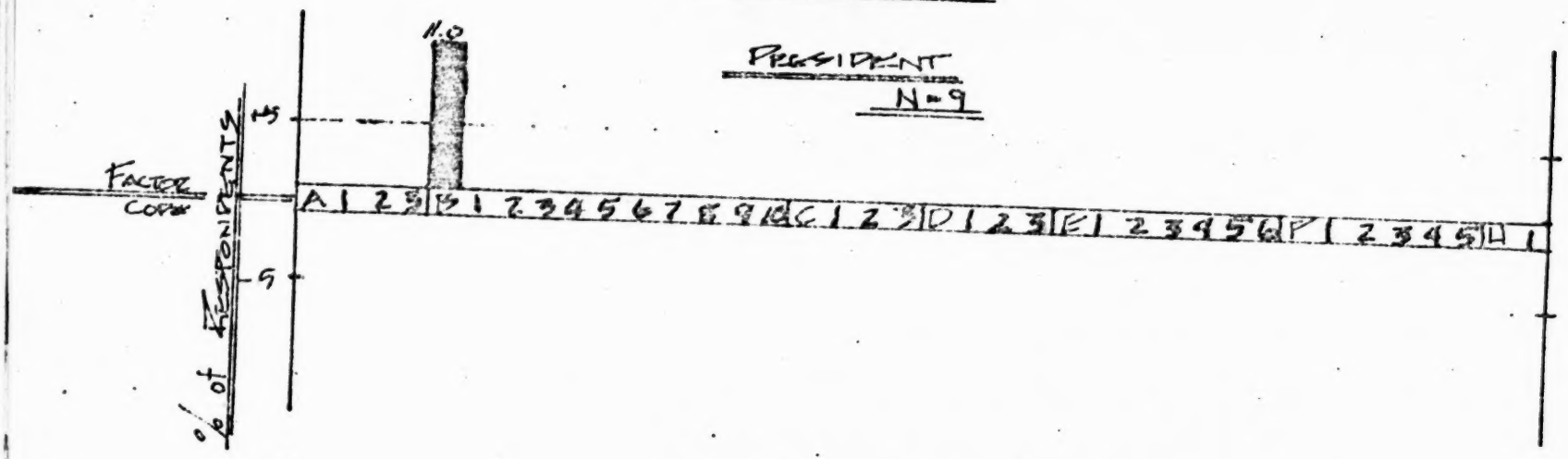
PRIVATE SCHOOLS; N = 69



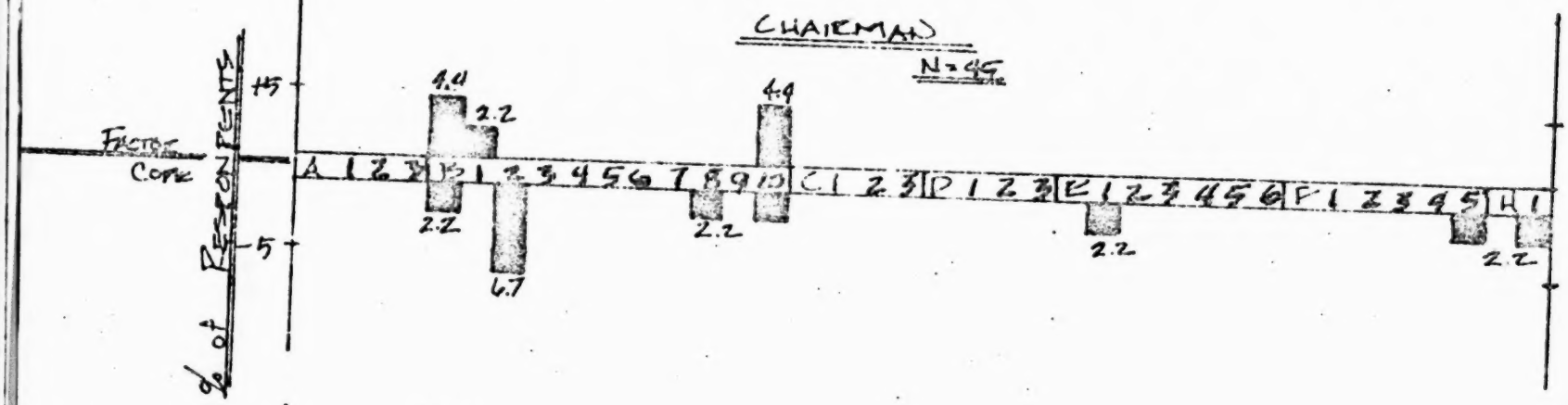
I-C:d (PART 2)

STUDENTS

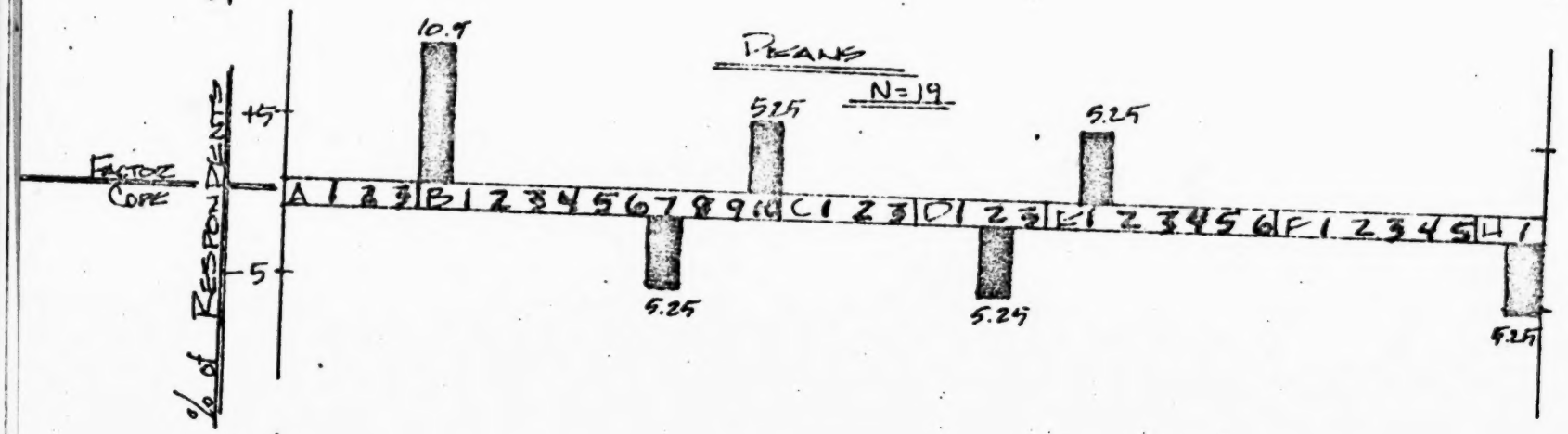
PRESIDENT
N=9



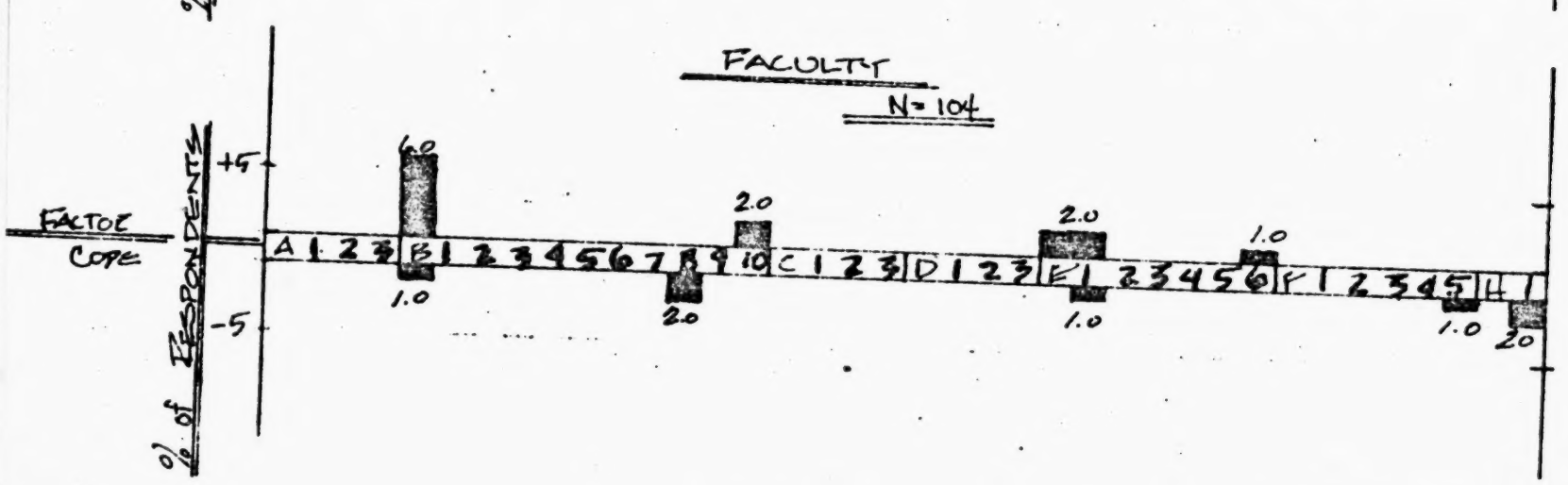
CHAIRMAN
N=45



PEERS
N=19



FACULTY
N=104



principally those of degree rather than factors mentioned. Attitudes attributed to faculty and students concerning instructional television are substantially similar throughout data breaks for each category except that the deans believe students to have had favorable experience with ITV while presidents, chairmen, and faculty are less sure. In most other instances of differences revealed by data breaks the absolute number of respondents where significant percentages are found are insufficient to suggest an appropriate realiability. The second questionnaire category (identified as series II in this report) was headed as "Televised Courses offered by NETCHE". The first question in this series was "A". The following courses are being offered by NETCHE during the fall semester 1967-1968: Aesthetics, Macro-Economics, Concepts of Modern Mathematics, and General Psychology. What factors influenced the decisions of your institution, administration, or department to utilize (or not to utilize) them?"

Figure II-A:a identifies the percentages in each of the data breaks referring to specific courses in replies to the questionnaires. Percentages exceeding 100 are the result of mention of more than one course in many replies. In most cases the most familiar course in Aesthetics ("Understanding the Fine Arts," a series of 42 half-hours produced by NETCHE with Dr. Douglas N. Morgan of the University of Texas as the instructor) although the presidents and deans mention Psychology as much or more than other courses. The psychology course was leased from the Univesity of Texas through the Great Plains National Instructional Television Library and consisted of 28 lessons each 45 minutes in length with Dr. Fillmore Sanford the instructor. The Economic course was "Principles of Economics: Macro-Economics" and was also produced by NETCHE, consisting of 42 half-hour lessons presented by Dr. A. Stuart Hall, University of Nebraska. "Math" refers to "Modern Concepts of Mathematics," also NETCHE produced with 28 half-hours taught by Dr. John Houston Banks of George Peabody College for Teachers. The analysis of the percentage of respondents referring to specific broadcast courses suggests -- if specific reference can be presumed to indicate specific knowledge -- that presidents are the most familiar with NETCHE courses, deans of instruction rank next in knowledge of the courses, the department chairmen rank behind their deans, and the faculty respondents have the least familiarity with the content of the NETCHE course schedule. Respondents from the small private colleges revealed more acquaintance with NETCHE courses than their colleagues at the large public institutions.

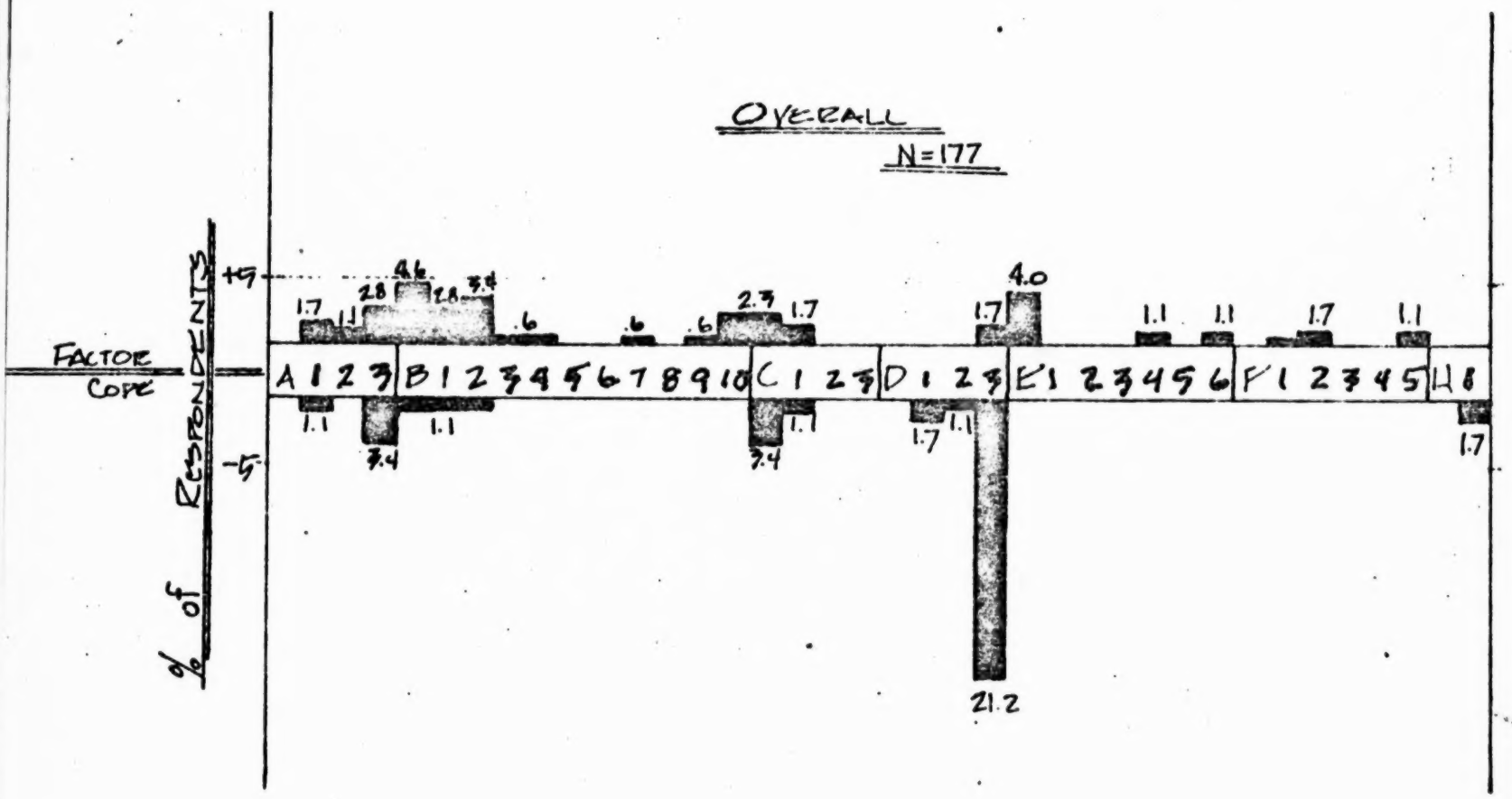
Over all the only significant factor which seemed to influence decisions to utilize or not utilize the TV courses was the absence of any plan to use televised instruction. This same

II-A : a

COURSES

	Overall (177)	Public (108)	Private 69)	Large (149)	Small (28)	President 9)	Deans (9)	Chairman (45)	Faculty (104)
AESTHETICS	16.8%	11%	29%	17%	28.6%	44.4%	19%	26.7%	5.7%
ECONOMICS	8%	6.5%	10%	7.8%	7.2%	22.2%	36.8%	8.9%	7.8%
MATH.	6.8%	2.8%	17%	6.5%	7.6%	33.3%	10.5%	6.7%	4.8%
PSYCHOLOGY	5.1%	5.4%	4.4%	5.2%	3.6%	44.4%	36.8%	8.9%	0%

II - A : b

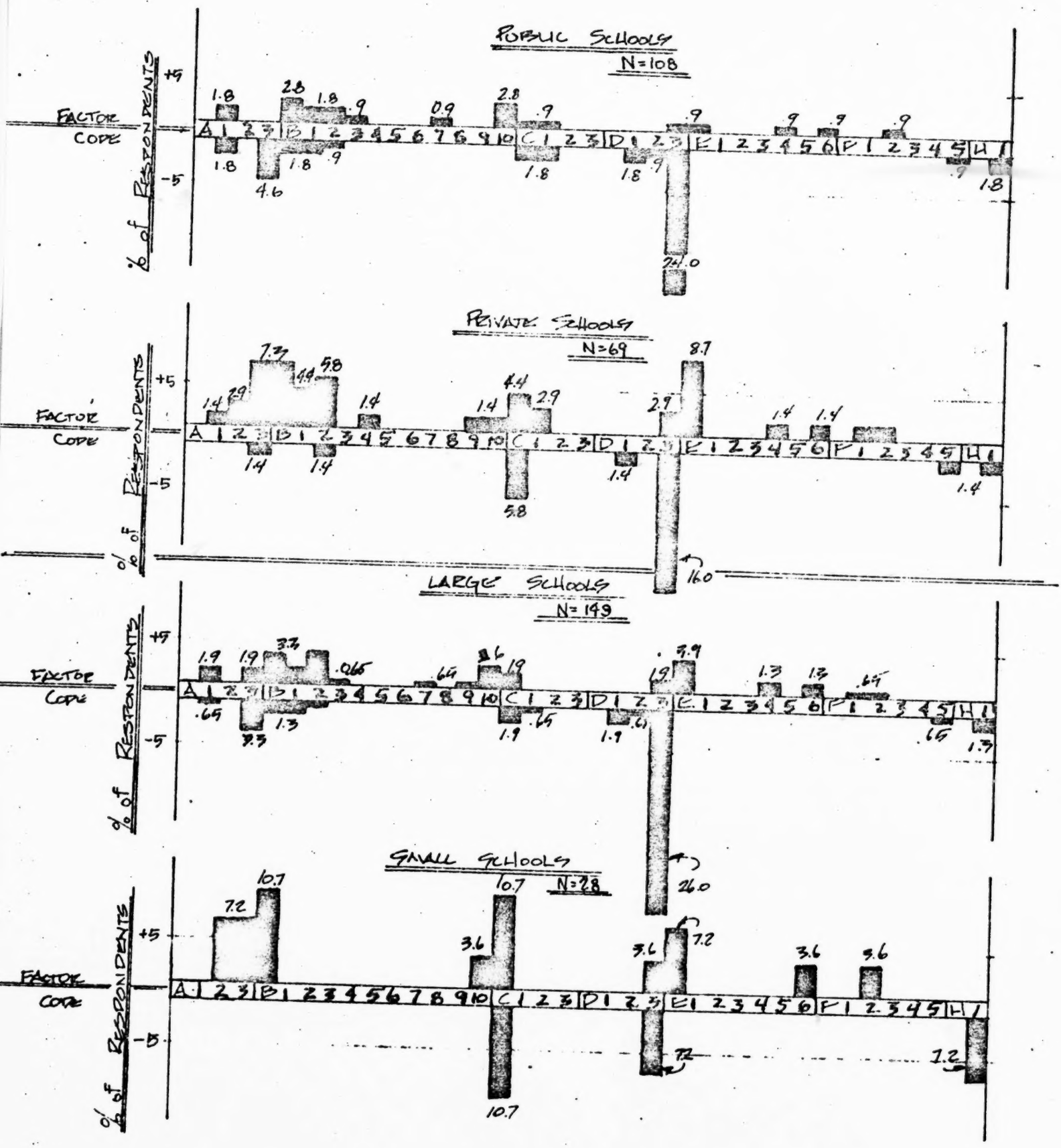


negative factor was significantly present in each of the data-breaks reported (Figures II-A:c, d). The small private schools also reacted negatively to the cost of offering the television courses (NETCHE charged a fee to each of its member institutions based on the number of its students enrolled in courses broadcast by NETCHE), although the percentage of respondents from the small schools who envisioned savings from the participation in these course offerings equalled the percentage of those who envisioned added expense. Respondents from small schools in significant numbers were not even aware of the existence of NETCHE, but it is notable that none of the presidents or deans responded in this manner. The presidents, deans, and chairmen were all concerned with instructional quality although for slightly different reasons as indicated in Figure II-A:d.

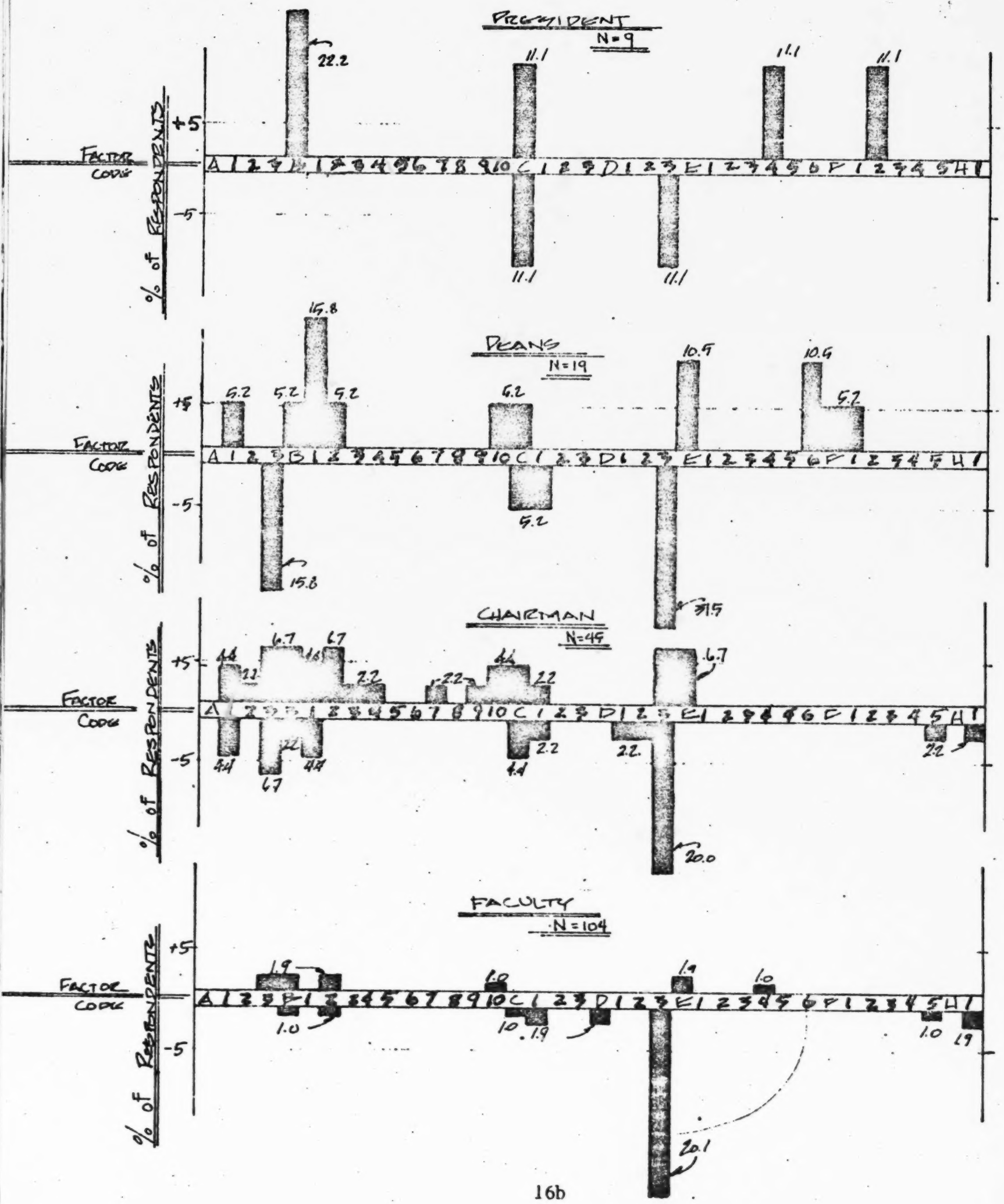
The next question (II-B) asked, "To what extent do the considerations involved in the decision to use (or not to use) televised courses during the fall semester 1967-1968 still apply? In what ways, if any, have they changed?" The perseverance of attitudes is strongly indicated in response to the first part of the question. In every category the percentage of respondents who indicated that considerations were unchanged, without qualification, exceeded the sum of those whose opinions had changed or seemed to be changing (Figure II-B:a). Where changes did occur, they seemed to be most pronounced among respondents from the private colleges where there was an apparent, though small, shift in polarity; and among chairmen and deans where attitudes appeared to be in the process of shifting.

A critical question is whether any changes in attitudes toward sharing instruction by television were toward more favorable or less favorable orientations. There is no information in Figure II-B:a which reveals which initially-held attitudes may have been altered; but data from the second part of the question (Figures II-B:b,c, and d) do reveal at least part of the answer. (All responses to question II-B must be interpreted with some reservation due to the possibility of an unmeasured halo effect. Since this is a recall item in part, present attitudes of the respondents may have shaded their recollections of attitudes held at an earlier point in time.) Although none of the factors is significant in the over-all analysis there is an indicated ratio of about 2½ to one of shifts toward negative attitudes. Most of this shift seems to be developed from the respondents of the small private schools and progressively by presidents, deans, and department chairmen. On the data-breaks, the economic factors show up more consistently than any other negative item on the over-all analysis although it is observed that none of the pres-

II- A : C


PUBLIC SCHOOLS
N=108
PRIVATE SCHOOLS
N=69
LARGE SCHOOLS
N=149
SMALL SCHOOLS
N=28
FACTOR CODE
% of RESPONDENTS
+5
-5

II-A:d

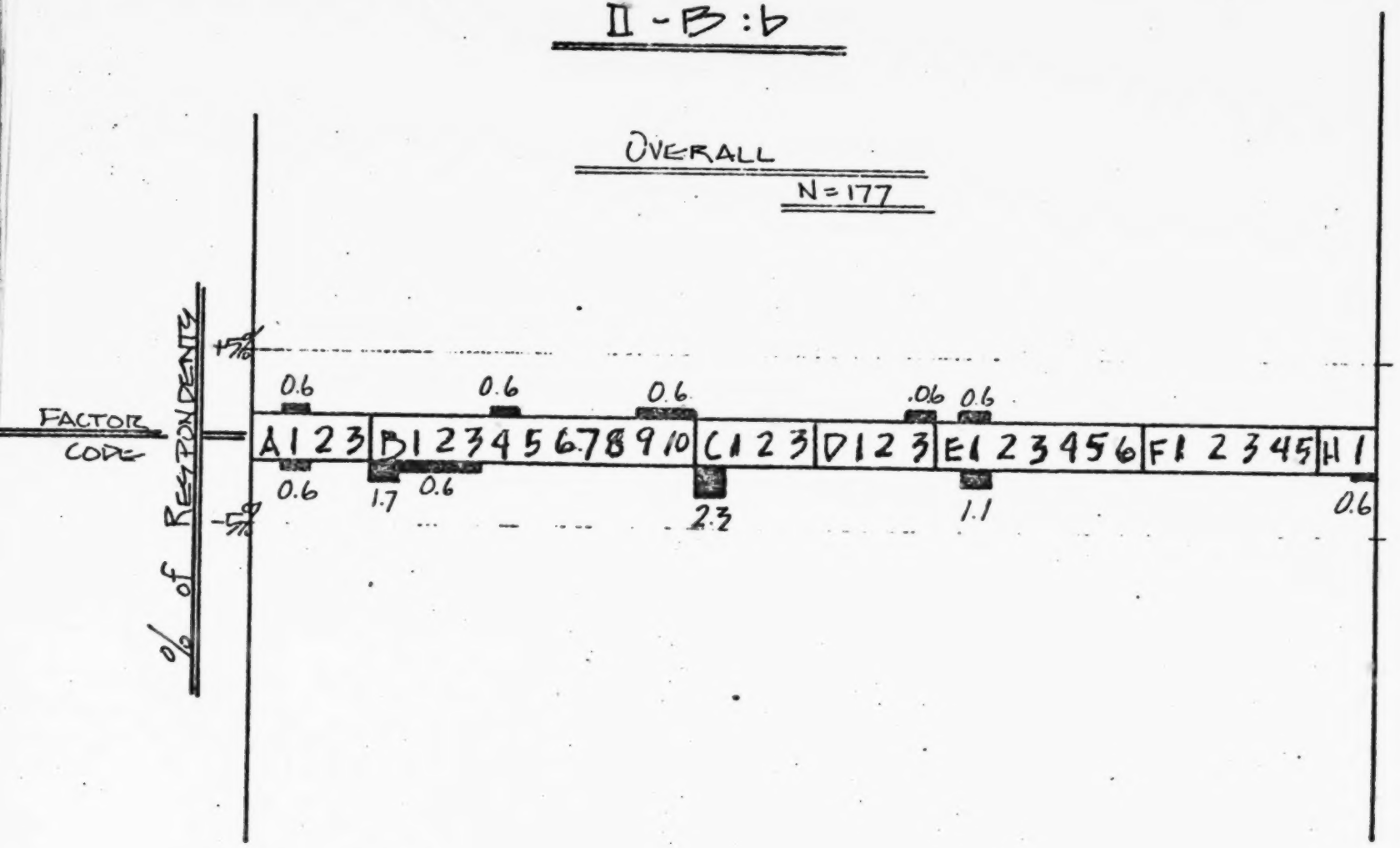

PRESIDENT
N=9
DEANS
N=19
CHAIRMAN
N=45
FACULTY
N=104
% of RESPONDENTS
+5
-5
FACTOR CODE
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
22.2
11.1
15.8
5.2
6.2
10.5
10.6
6.7
4.4
2.2
1.9
1.0
20.0
20.1

II-B:a

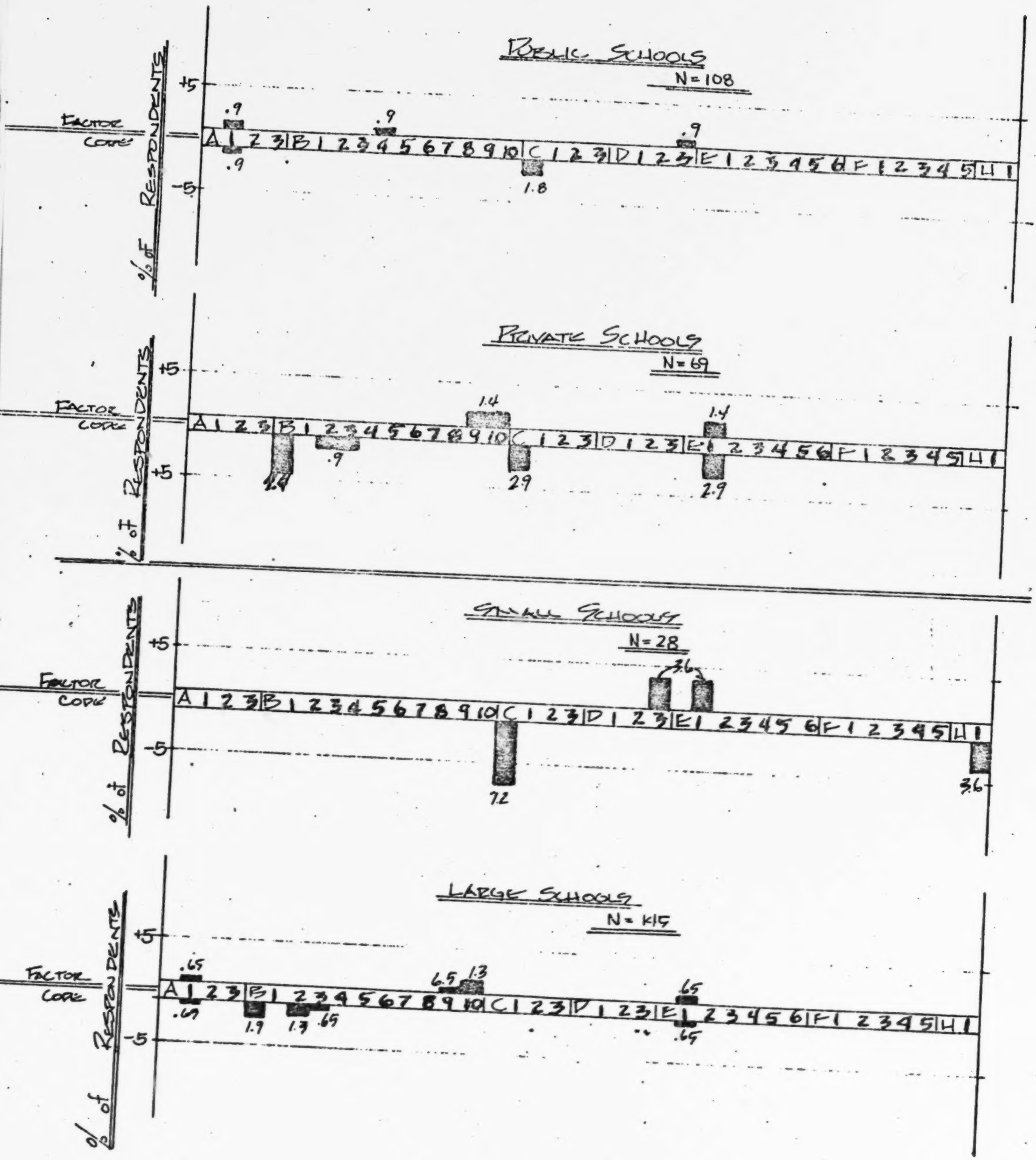
		OVERALL N=177	PUBLIC N=108	PRIVATE N=69	LARGE N=149	SMALL N=28	PRESIDENT N=9	DEANS N=19	CHAIRMAN N=45	FACULTY N=104
SAME	1:	30.5	30	29	29	25	33.3	31.5	57.3	19.2
	2:	2.3	2.8	1.4	1.3	3.6	0.0	5.3	4.4	1.0
	3:	2.3	1.8	2.9	1.3	3.6	No	No	2.2	2.9
	4:	2.8	1.8	4.4	3.2	No	11.0	10.6	4.4	No
DIFFERENT	5:	2.3	0.9	5.8	1.3	3.6	No	5.3	6.7	No

NOTE: FIGURES IN %

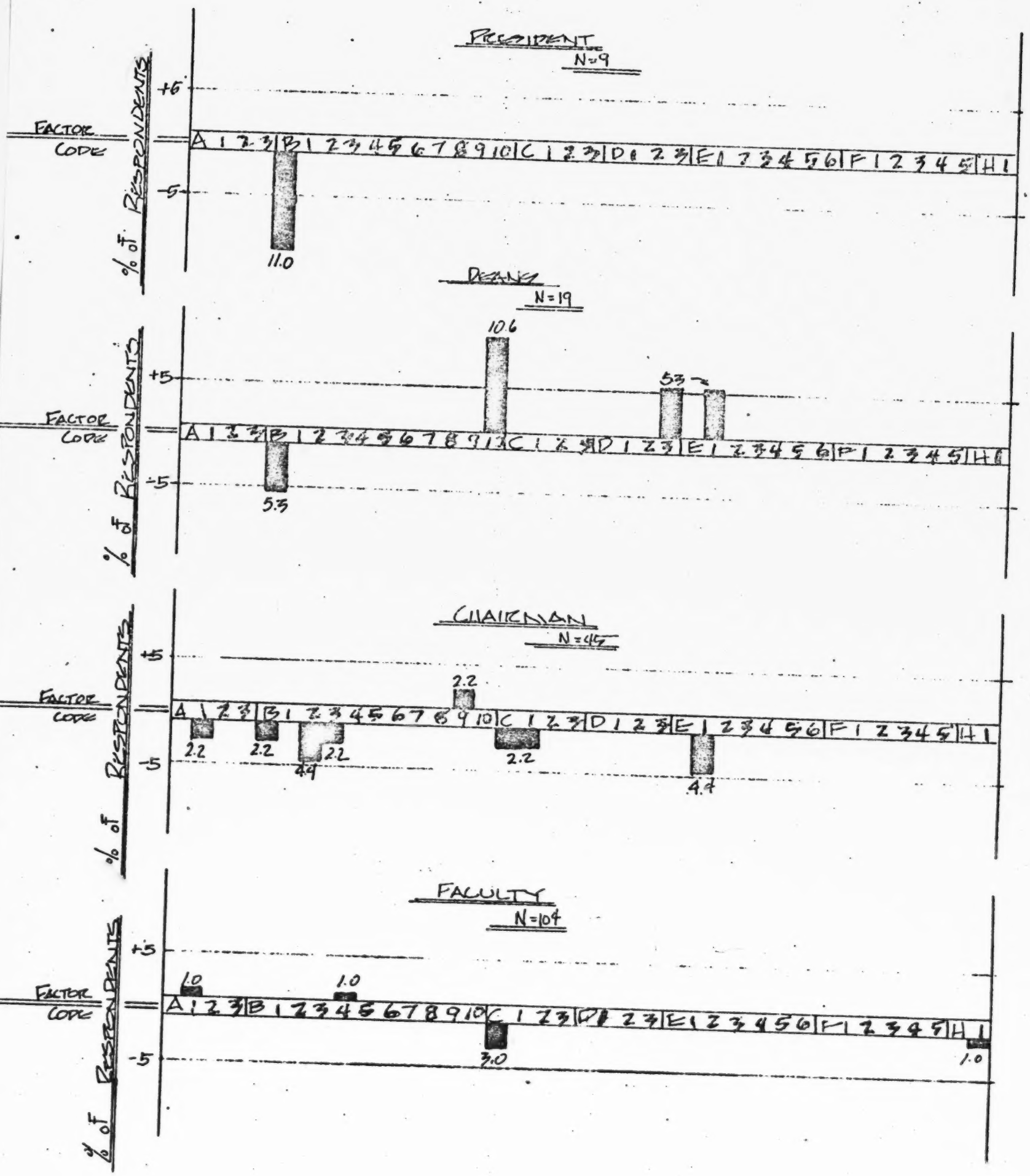
II-B:b



II-B : c


PUBLIC SCHOOLS
N = 108
% of RESPONDENTS
FACTOR CODE
+5
-5
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
.9
.9
.9
.9
1.8
PRIVATE SCHOOLS
N = 69
% of RESPONDENTS
FACTOR CODE
+5
-5
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
1.4
1.4
2.4
.9
2.9
2.9
SMALL SCHOOLS
N = 28
% of RESPONDENTS
FACTOR CODE
+5
-5
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
3.6
3.6
7.2
3.6
LARGE SCHOOLS
N = 115
% of RESPONDENTS
FACTOR CODE
+5
-5
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
.65
.65
1.9
1.3
.65
6.5
1.3
.65
.65

II-B:d


PRESIDENT
N=9
+6
-5
11.0
% of RESPONDENTS
FACTOR CODE
A 1 2 3 | B 1 2 3 4 5 6 7 8 9 10 | C 1 2 3 | D 1 2 3 | E 1 2 3 4 5 6 | F 1 2 3 4 5 | H 1
DEANS
N=19
+5
-5
10.6
5.3
5.3
CHAIRMAN
N=45
+5
-5
2.2
2.2
2.2
4.4
2.2
4.4
FACULTY
N=104
+5
-5
1.0
1.0
3.0
1.0

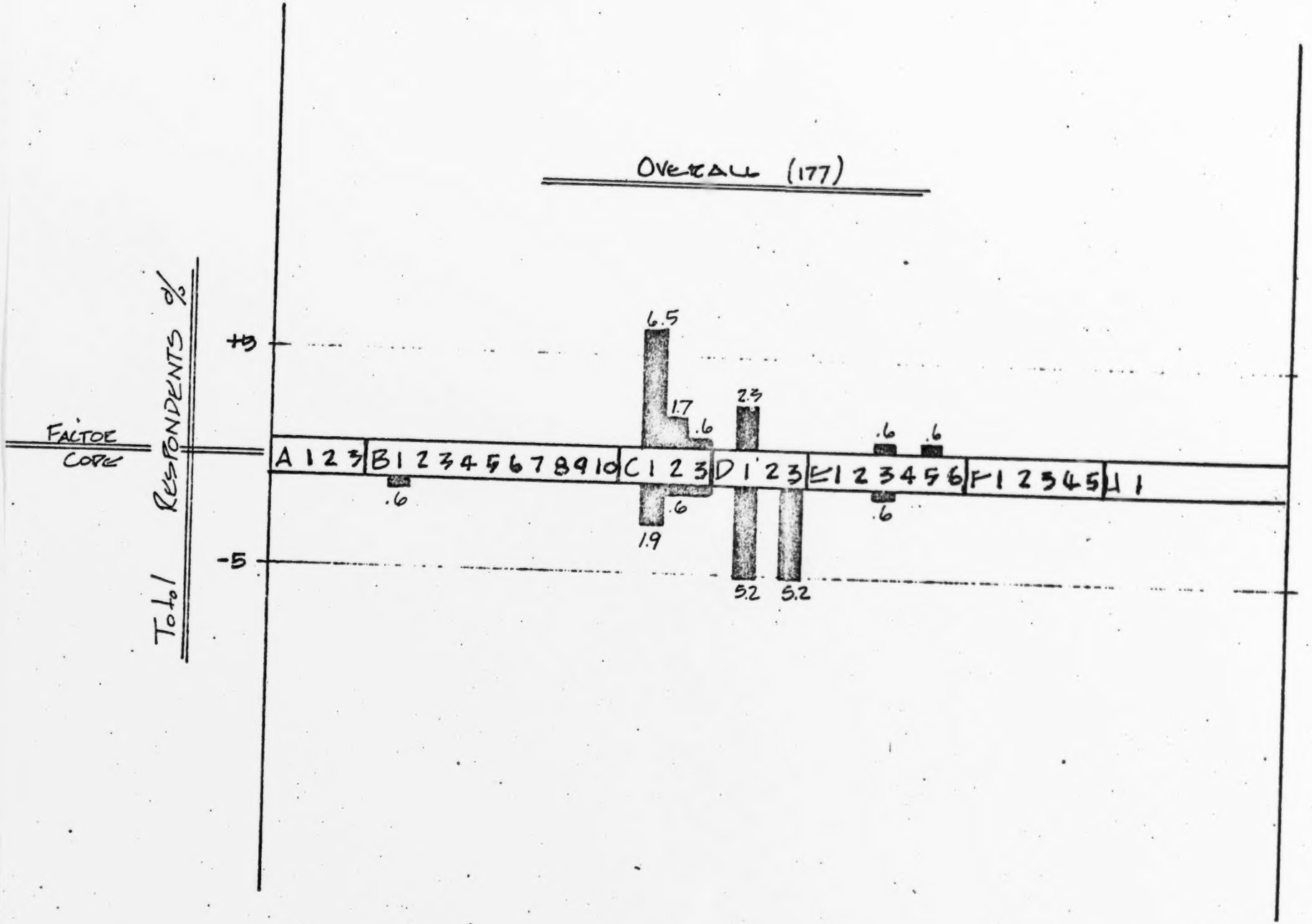
idents or deans supported this concern. It is apparent that presidents, deans, and chairmen (in that order) received less improvement in instructional quality than they had anticipated, but none of the 104 faculty members responding reported any shift here. The only significant shift in a positive direction in those factors relating to the impact on quality of instruction revealed by NETCHE's first semester of full operation was the response of the deans to the value of the supplementary lessons. The sharpest contrast in responses was that on the factor of experience with ITV reported by the deans and department chairmen: the deans apparently feeling that the semester's experience had contributed to a positive change of attitude while the chairmen reacted negatively.

Question II-C was "If you are now using any televised course, what special arrangements have been necessary (please be as specific as possible, eg. scheduling, equipment, catalog changes, etc.)? The over-all response to this test item is characterized by ambivalence with most of the factors involved having both positive and negative interpretations. Most found the availability of, or provision for, electronic equipment to utilize the televised instruction to be a positive factor, yet the need to provide it or the quality of that which was available was identified also as negative. Although not in significant percentages, the provisions for space and the capital investment required were identified as both advantageous and disadvantageous by some respondents. Similarly while the televised materials made scheduling of classes better for some, even more found it to be a handicap; but the need to change course offerings was rated significantly as a difficulty in using NETCHE courses during the first semester the full schedule was offered.

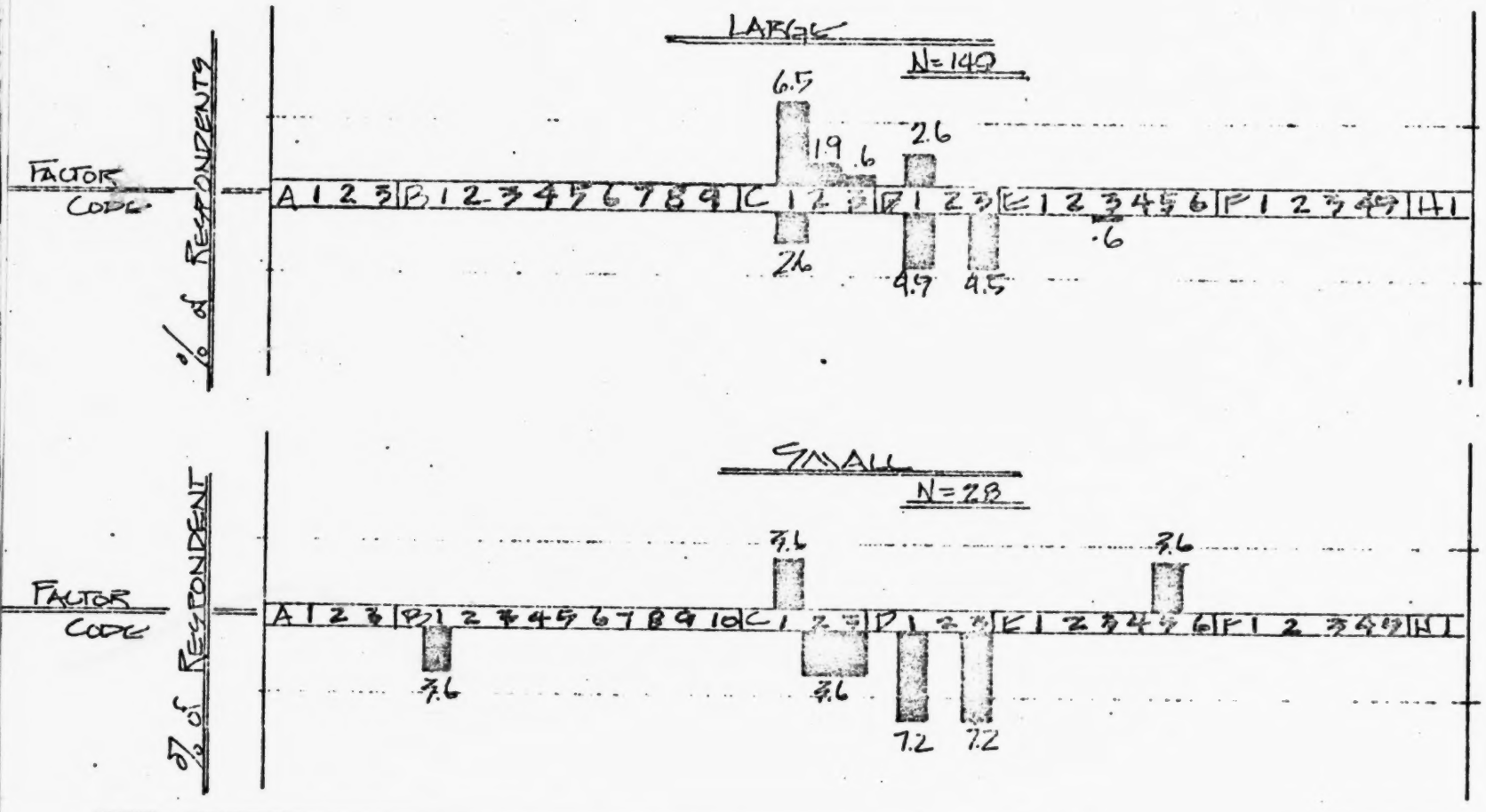
The data breaks revealed by Figures II-C:b,c, and d were essentially consistent with the over-all pattern indicating that the over-all information (Figure II-C:a) essentially replicated the individual data-break data rather than presenting an average which was representative of none, but some unique differentiation was revealed in the academic position sub-categories. The presidents and deans who responded to this item were unanimous in approving the changes in electronic equipment, space arrangements, and the capital expenditures for ITV utilization. Part of this is accountable in the assistance NETCHE provided in obtaining closed-circuit television equipment for many of its member schools, including achievement of a sizeable grant for equipment for about half of the colleges; but the sample reported here includes those who received nothing as well as those who received a basic TV receiving and distribution and recording unit.

II - C : a

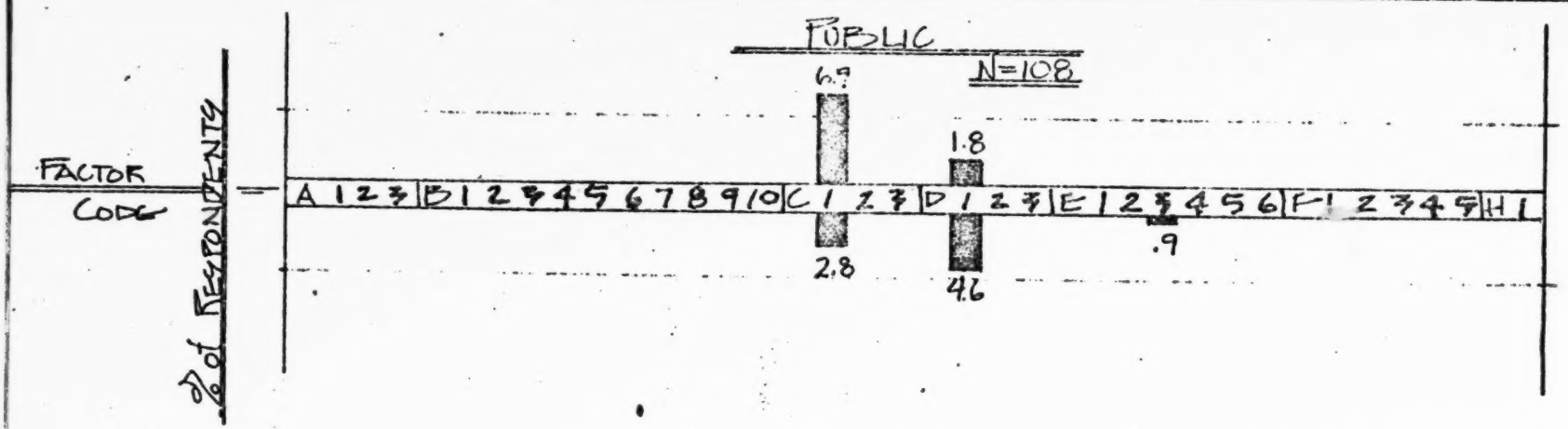
OVERALL (177)

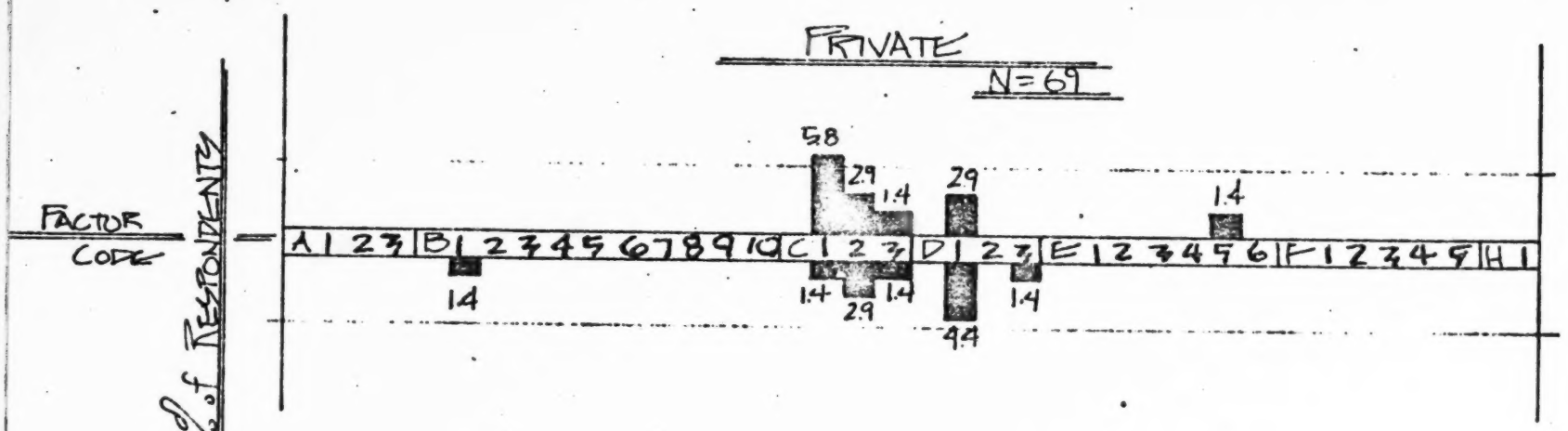


II-C:b


LARGE
N=140
% of RESPONDENTS
FACTOR CODE
A 1 2 3 B 1 2 3 4 5 6 7 8 9 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
6.5
19.6
2.6
2.6
4.7
4.5
.6

SMALL
N=28
% of RESPONDENT
FACTOR CODE
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
7.6
7.6
7.6
7.6
7.2
7.2


PUBLIC
N=108
% of RESPONDENTS
FACTOR CODE
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
6.9
1.8
2.8
4.6
.9


PRIVATE
N=69
% of RESPONDENTS
FACTOR CODE
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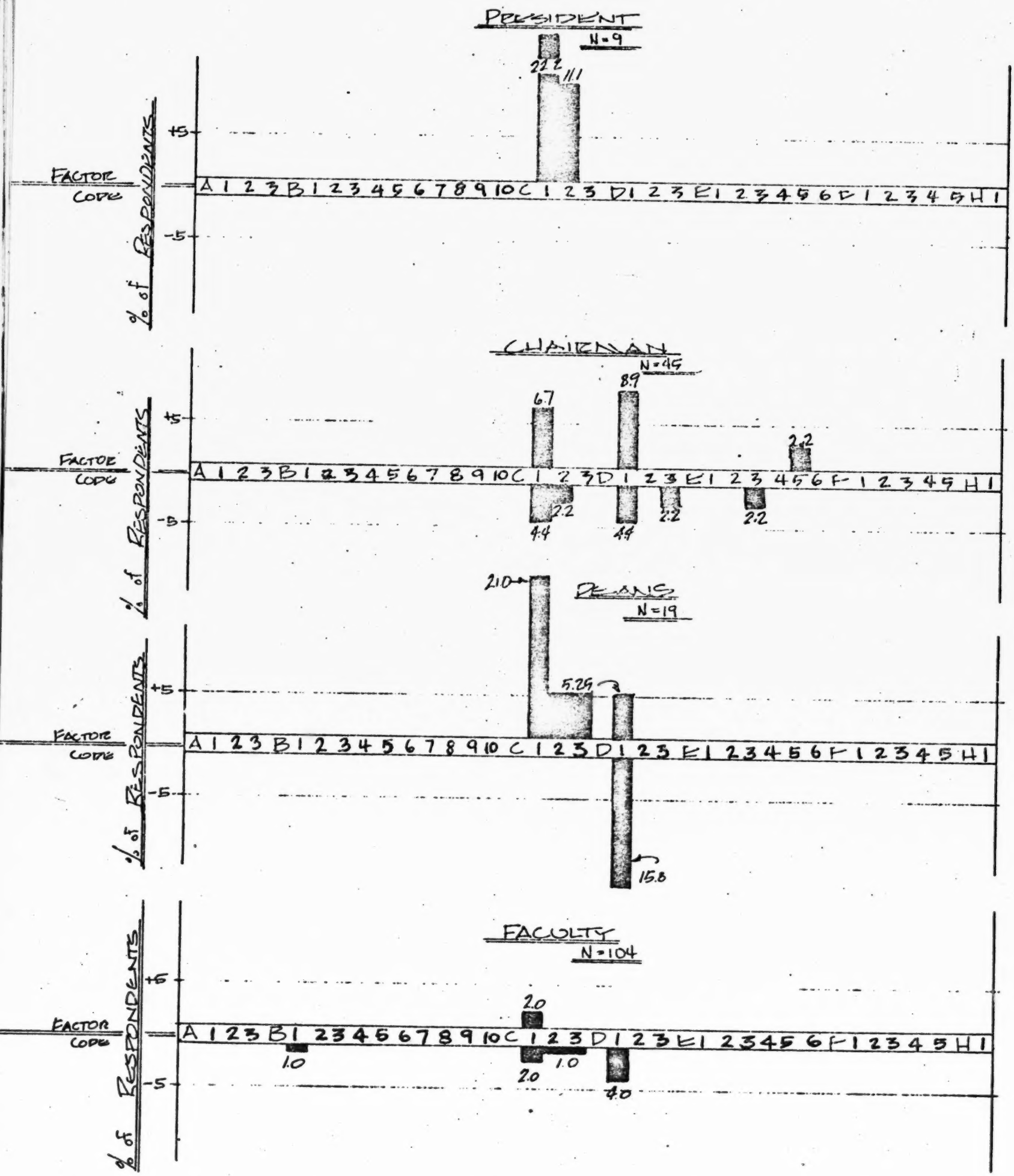
5.8
2.9
1.4
2.9
1.4
1.4
1.4
2.9
1.4
4.4
1.4

II-C:c


PRESIDENT
N=9
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11.1
+5
-5
% of RESPONDENTS
FACTOR CODE
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CHAIRMAN
N=45
6.7
8.9
2.2
2.2
4.4
4.4
2.2
2.2
DEANS
N=19
21.0
5.25
15.8
FACULTY
N=104
2.0
1.0
2.0
1.0
4.0

The final question in Group II was "To what extent did you personally participate in the deliberations concerning use of televised courses?" Figure II-D:a reveals the distribution of responses on a 5-point scale of involvement. It is apparent that there was more involvement in the small private colleges than in the larger and public ones, and that the presidents and deans were more involved than chairmen or faculty. Except for the faculty respondents with 27% reporting no involvement and 21% varying degress of participation in the decisions, all cells show that there were more involved than not involved in each of the data-break categories.

At this point an analysis was made of those individual responses reporting a high degree of participation in the deliberations concerning utilization of the televised courses, comparing their involvement (4 or 5 on the scale shown in Figure II-D:a) with their responses to question II-A pertaining to rationale for utilization of NETCHE courses. The results are graphed in Figure II-D:b. Significant consideration for the apparent decision makers were television's value in improving the quality of instruction, particularly in expanding the curriculum, providing outstanding instructors, and the coordinate availability of the supplementary lessons. Most notable, however, was the presence of previously rewarding experience with the use of television in instruction. Significant on the negative scale was the indication that decisions were not made because of any inadequacies of present faculties. Of most influence in decisions not to use NETCHE courses was the apparent absence of any curriculum plans which necessitated these offerings.

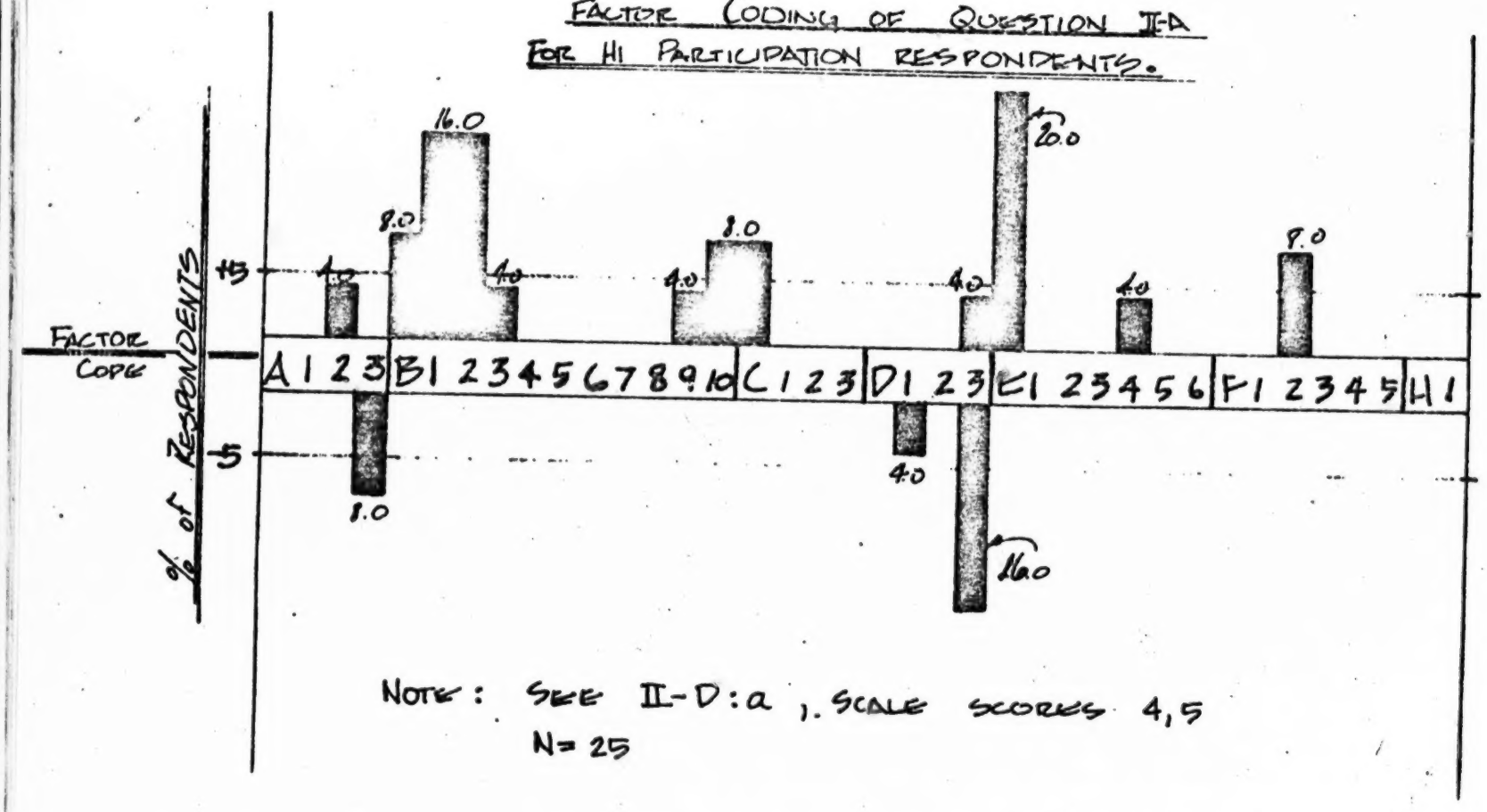
The third major category of questions related to the supplementary instruction by television which served many different courses at all levels with a single lesson or short series of lessons to add to existing classroom instruction. The first item in this group was "A. In what way, if at all, are you presently utilizing (or planning to use) the programs of supplementary instruction provided twice a week be NETCHE? Please discuss specifics, including programs used and viewing facilities provided." Usable data from responses to this question are reported on charts of Figure III-A:a.

The most used supplementary programs presented by NETCHE are those related to courses in teacher education, but the data-breaks reveal that the over all total comes only from respondents at the large schools. Respondents of the small schools tend to use more courses in the humanities than in other categories, and in the sample returning questionnaires the utilization seems to be

II – D : a

		Overall (N=177)	Small (N=28)	Large (N=149)	Public (N=103)	Private (N=69)	President (N=9)	Chairman (N=45)	Dean (N=19)	Faculty (N=164)
Very much	5	5.2%	7.2%	4.5%	3.7%	7.3%	22.2%	6.7%	21%	0%
	4	9.2%	7.2%	9.0%	8.2%	8.7%	11.1%	15.8%	26.3%	3%
	3	9.5%	18%	5.2%	5.5%	12%	0%	11.0%	5.2%	8%
	2	11.5%	0%	12.9%	10%	14%	0%	20.0%	10.5%	10%
Not at all	1	24.7%	18%	21.3%	25.8%	14%	11.1%	22.2%	5.25%	27%

II – D : b



NOTE: SEE II-D:a , SCALE SCORES 4, 5
N= 25

III - A : a

OVERALL (N = 177)

FIGURES GIVEN IN %

PROGRAMS	LARGE (N=119)	SMALL (N=29)	PUBLIC (N=108)	PRIVATE (N=69)	PRESIDENT (N=9)	CHAIRMAN (N=45)	DEAN (N=19)	FACULTY (N=4)
Art	1.2%	1.3%	0%	1.8%	0%	0%	4.4%	0%	0%
Psychology	0.6%	0.6%	0.0%	0.9%	0%	0%	2.2%	0%	0%
Teaching	4.2%	5.2%	0%	3.6%	5.7%	0%	15.4%	0%	1.0%
Modular & Flexible Scheduling	3.0%	3.3%	0%	1.8%	4.2%	0%	8.9%	0%	1.0%
Math	0.6%	0.65%	0%	0.9%	0%	0%	.0%	0%	1.0%
Computers	0.6%	0.65%	0%	0.9%	0%	0%	2.2%	0%	0%
Dead Sea Scrolls	1.2%	0.65%	3.6%	0%	2.8%	0%	0%	0%	2.0%
American Literature	0.6%	0%	3.6%	0%	1.4%	0%	2.2%	0%	0%
Molecular Orbital Theory	0.6%	0.65%	0%	0%	1.4%	0%	0%	0%	1.0%
Print Making	0.6%	0%	3.6%	0%	1.4%	0%	2.2%	0%	0%
Silver - Smithing	0.6%	0.65%	0%	0%	1.4%	0%	2.2%	0%	0%
Any	0.6%	0.65%	0%	0.9%	0%	0%	2.2%	0%	0%

PROGRAM USE BY INSTRUCTOR

PROGRAMS	19.8%	18.2%	18.0%	11%	21%	11%	26.4%	31.5%	13.0%

III-A:b

RESPONDENTS WHOSE INTERESTS LIE IN ECONOMICS, MATH-SCIENCE, PSYCHOLOGY, AND AESTHETICS. (FIGURES GIVEN IN %)

	OVERALL (N=89)	ECONOMICS (N=22)	MATH-SCIENCE (N=27)	PSYCHOLOGY (N=10)	AESTHETICS (N=30)
COMPUTERS	1.1%	0%	3.7%	0%	0%
ORBITAL MOLECULAR THEORY	1.1%	0%	3.7%	0%	0%
MODULAR SCHEDULING	1.1%	0%	3.7%	0%	3.3%
MICRO TEACHING	1.1%	0%	3.7%	0%	3.3%
MATH	1.1%	0%	3.7%	0%	0%
FINE ARTS	1.1%	0%	0%	0%	3.3%
INSTRUCTURAL TECH.	1.1%	0%	0%	0%	3.3%
PRINT MAKING	1.1%	0%	0%	0%	3.3%
AMERICAN LITERATURE	1.1%	0%	0%	0%	3.3%

PROGRAM USE BY ABOVE INSTRUCTOR

	18.7%	4.5%	33%	10%	19.8%

much more commonly acknowledged by department chairmen than by the teaching faculty. The summary chart reveals that approximately 20% of the respondents have made use of the supplementary lessons, although one of the lowest utilization categories is that of the faculty with 13% reporting utilizations. This could well be the result of the selection of the sample for the study. All deans, all presidents, and an entire category of department chairmen were included, each responding on behalf of many faculty members but with somewhat limited knowledge of utilizations; but the faculty respondents reported only for themselves, therefore for only about 10% of the total faculty. As anticipated, the presidents report a low utilization (experience has shown that the presidents receive little information from their faculties concerning the utilizations of the supplementary lessons, viewing the programs being treated mostly as a normal class assignment, not a college decision, in the majority of cases). Although little difference in utilization rate accurs as a result of the size of the institution, there is a considerably higher rate for the private shcools than for the public.

"B. From what sources did information and or discussion arise influencing your use (or non-use) of NETCHE supplementary broadcasts?" was the second item in category III. From the responses received seven sources were identified (see Figures III-B:a and b). Among all respondents the NETCHE newsletter was the single dominant source of information, exceeding the sum of all other sources of information in every category. This implies that origination of information on the local campuses is either minimal or is identified by the respondents as a concomitant of the newsletter. Among those who have used the supplementary lessons, however, the pattern is quite different. Although the newsletter remains at least as significant a source of information as others in every data-break category, the influence of varied informational patterns becomes more noticable. Particularly for the large and private institutions the sources are varied although none reach a statistically significant level except the newsletter. Although the percentages are small, it is appropriate to observe the pattern of influence reported by the teaching faculty who have used NETCHE supplements: the newsletter remains the dominant sources of information, followed by the presidents, deans, and colleagues (including department chairmen and other faculty members equally) in that order. When the non-user respondents are isolated for analysis on this item, the very low level of information in general is apparent with none of the cells on either the over-all category or the data-breaks approaching the 5% level selected as indicating significance.

III - B : a

SOURCE : OVERALL (N=177)

	OVERALL (N=177)	LARGE (N=149)	SMALL (N=28)	PUBLIC (N=108)	PRIVATE (N=69)	PRESIDENTS (N=9)	DEANS (N=19)	CHAIRMAN (N=45)	FACULTY (104=N)
NEWSLETTER	18.7%	17.8%	21.6%	15%	25.6%	22.2%	15.8%	30.8%	15%
DEANS	1.2%	1.3%	0%	2%	0%	0%	0%	2.2%	1.0%
PRESIDENT	0%	0%	0%	0%	0%	0%	0%	0%	0%
CHAIRMAN	0.6%	.65%	0%	1.0%	0%	0%	0%	0%	1.0%
OTHER FACULTY	7.0%	3.3%	0%	1.0%	5.6%	11.1%	0%	6.7%	1.0%
A-V DIRECTOR	1.2%	1.3%	0%	0%	2.8%	0%	0%	.0%	0%
STUDENTS	0%	0%	0%	0%	0%	0%	0%	0%	0%

SOURCE & USERS IN %

	OVERALL (N=177)	LARGE (N=145)	SMALL (N=28)	PUBLIC (N=107)	PRIVATE (N=28)	PRESIDENT (N=9)	DEANS (N=19)	CHAIRMAN (N=47)	FACULTY (N=104)
NEWSLETTER	4.2%	3.9%	7.2%	2%	7%	0%	5.3%	4.4%	4%
DEANS	2.4%	1.9%	0%	1%	42%	0%	5.3%	0%	3%
PRESIDENT	1.8%	1.3%	3.6%	1%	2.8%	0%	5.3%	0%	2%
CHAIRMAN	.6%	.68%	0%	0%	1.4%	0%	0%	0%	1%
OTHER FACULTY	1.8%	2%	0%	0%	4.2%	0%	0%	4.4%	1%
A-V DIRECTOR	.6%	.68%	0%	0%	1.4%	0%	0%	0%	0%
STUDENTS	6%	.68%	0%	0%	1.4%	0%	0%	2.2%	0%

Source & Non-Users in %

	Overall (N=177)	Large (N=149)	Small (N=28)	Public (N=108)	Private (N=68)	Presidents (N=9)	Deans (N=19)	Chairman (N=45)	Faculty (N=104)
Newsletter	1.2%	1.3%	0%	1%	1.9%	0%	0%	0%	2%
Deans	.0%	0%	0%	0%	0%	0%	0%	0%	6%
President	.6%	.7%	0%	1%	0%	0%	0%	22%	0%
Chairman	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Faculty	1.2%	1.3%	0%	2%	0%	0%	0%	22%	1%
A-V Director	0%	0%	0%	0%	0%	0%	0%	0%	0%
Students	0%	0%	0%	0%	0%	0%	0%	0%	0%

"C" Do you feel that the plan to offer two programs if supplementary instruction per week throughout the academic year 1967-1968 is appropriate? Why or why not? To what extent do you believe your membership and participation in NETCHE is justified by these broadcasts." Figure III-C:a reveals the replies to the first portion of the above question. The overall response is definitely affirmative. From the data-breaks it appears the presidents and department chairmen of the large public institutions are the strongest advocates of the plan while the deans of small private schools represent the most doubtful group; but the deans of small private schools are still consistently more favorable than unfavorable toward the plan for supplementary instructional broadcasts. From the data-break reports (Figures III-C:b and c) there are three apparent differences between the reasons given for supporting or opposing the plan by small private schools which differ from those of the large public institutions, and none of these are at the 5% level chosen to represent significance. Respondents at the small private schools exhibit concern for the costs of such a plan, and the same groups report a higher incidence of ignorance about NETCHE. In the academic position data-break the only item reported negatively by the deans indicates a general lack of confidence in the quality of instruction provided by, or stimulated by, the supplementary lessons. The percentage of responses here was negatively significant in the same proportion as the positive responses by the same sub-group.

Using a five-point scale (Figure III-C:e) to interpret the responses to the question, "To what extent do you believe your membership and participation in NETCHE is justified by these broadcasts?" there were no replies appropriate to the "Not at all" cells; but the responses reported were nore neutral than favorable. The number of respondents reporting was too small to provide meaningful data for this item however.

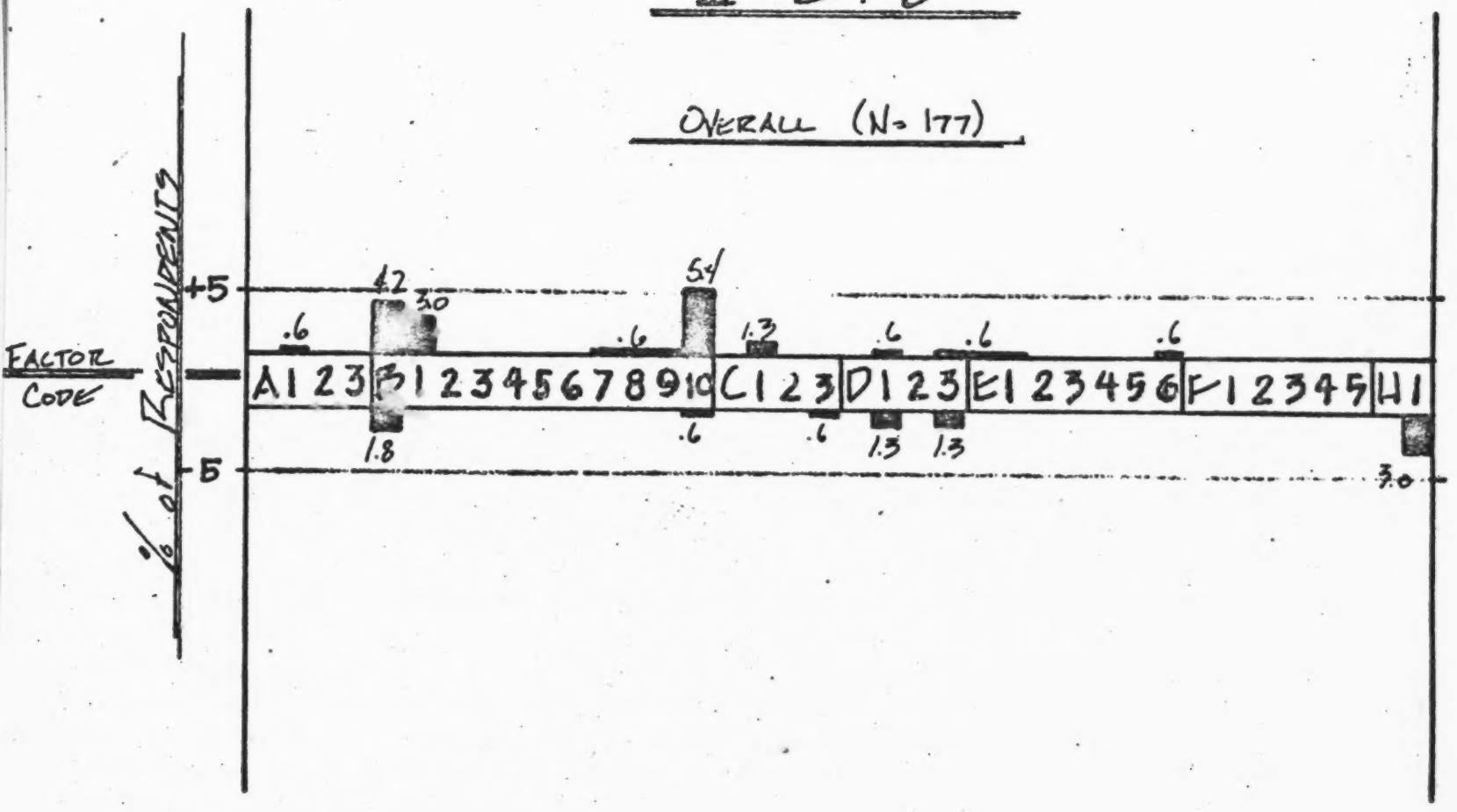
The final test item concerning the supplementary instruction broadcasts asked, "D. What particular units of supplementary instruction provided by NETCHE are of benefit to you?" This item partially replicates item III-A but with the added stipulation, "of benefit". Figure III-D:a indicates on a bipolar scale that "none" is a more frequent response than "all", a response that might be anticipated since these lessons involve many areas and would be unlikely for all of the lessons to be of value to any one academic discipline. Chairmen are more consistently interested in these programs than any other group. Supplementary lessons in science, teaching methods, literature, and hymanities in general are more consistently mentioned than others.

III - C : a

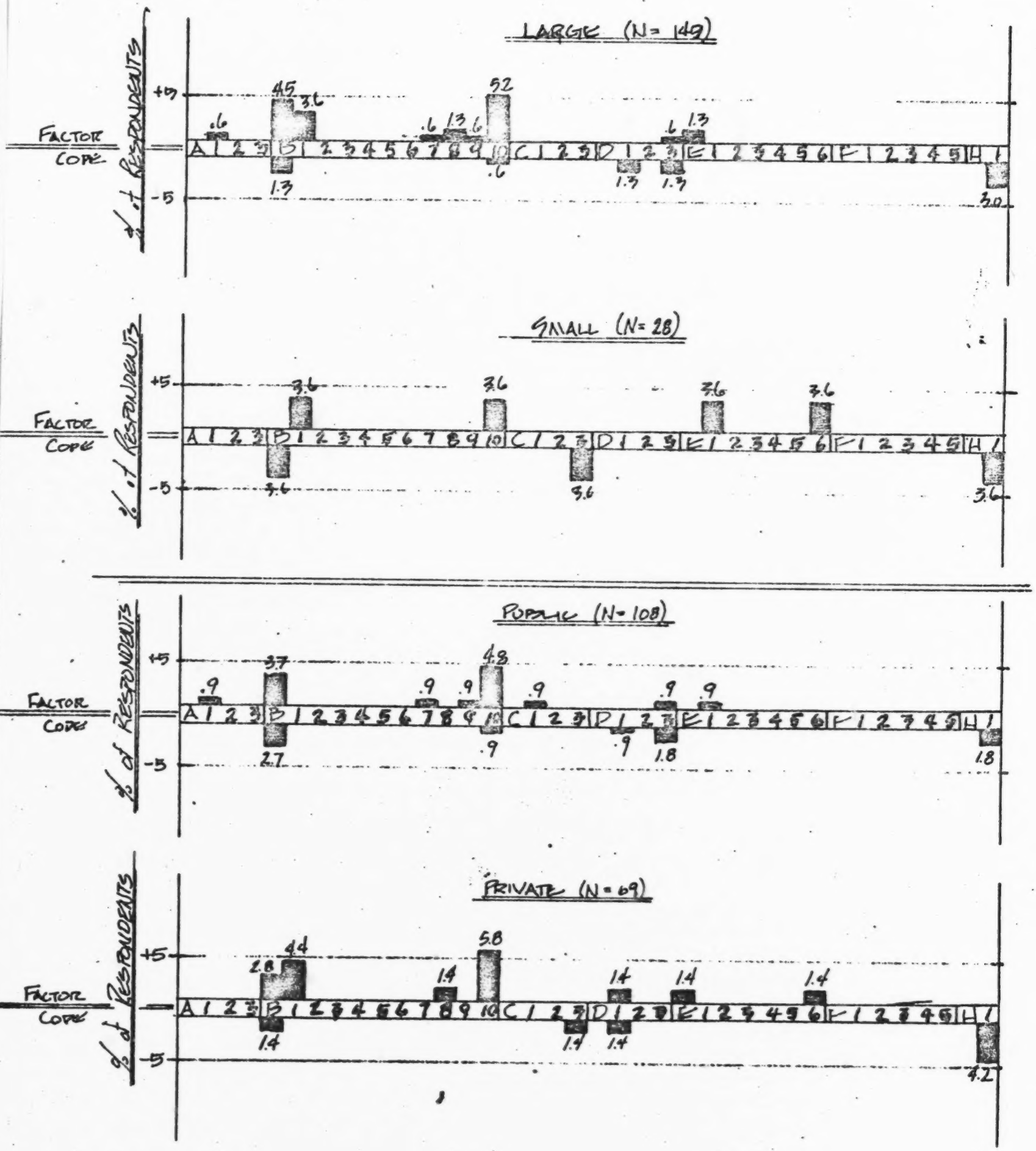
	Overall (N=177)	Large (N=149)	Small (N=28)	Public (N=108)	Private (N=69)	Prestigeant (N=9)	Deans (N=19)	Chairmen (N=45)	Faculty (N=104)
YES	24%	23%	18%	38.5%	22.8%	22.2%	31%	33%	18%
NO	54%	3.9%	14.4%	1.8%	13.3%	0%	15.8%	2.2%	4.0%

III - C : b

OVERALL (N= 177)



III-C : c


LARGE (N= 149)
SMALL (N= 28)
PUBLIC (N= 108)
PRIVATE (N= 69)
% of RESPONDENTS
FACTOR CODE
+5
-5
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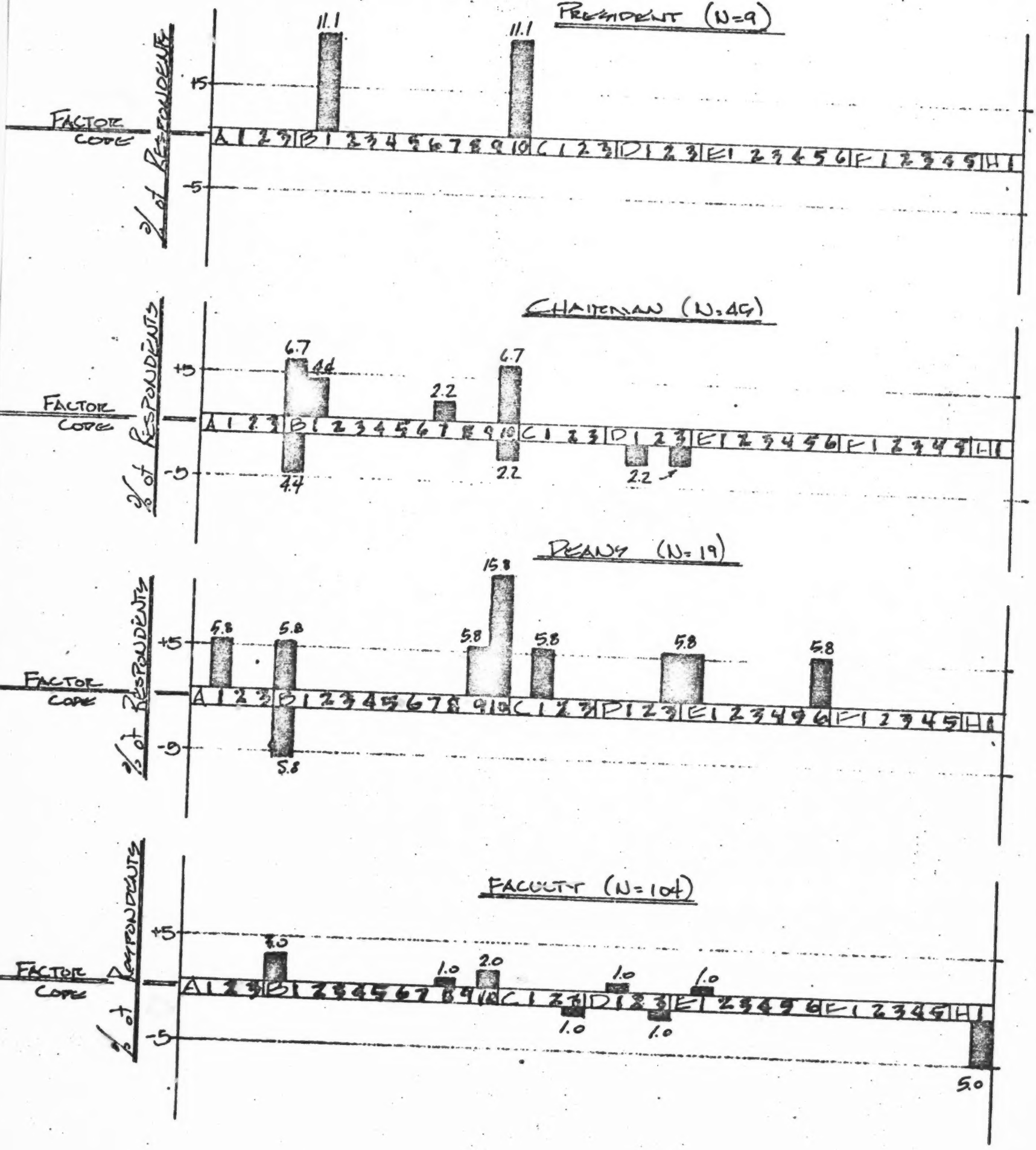
III-C:d


PRESIDENT (N=9)
% of RESPONDENTS
+5
-5
FACTOR CODE
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11.1
CHAIRMAN (N.A.G)
6.7
4d
2.2
6.7
4.4
2.2
2.2
DEANS (N=19)
15.8
5.8
5.8
5.8
5.8
5.8
5.8
5.8
FACULTY (N=104)
3.0
1.0
2.0
1.0
1.0
1.0
1.0
5.0

III - G:e

		Overall (N=177)	Large (N=149)	Small (N=28)	Public (N=108)	Private (N=69)	Professional (N=9)	Deputy (N=19)	Chairman (N=45)	Faculty (N=104)
Very Much	5	1.2%	.69%	3.6%	0.9%	1.9%	0%	0%	2.2%	1.0%
	4	1.8%	1.9%	0%	.9%	2.8%	0%	0%	4.4%	1.0%
	3	3.0%	2.6%	3.6%	2.7%	2.8%	0%	0%	6.7%	2.0%
	2	2.4%	1.9%	3.6%	1.8%	2.8%	11.1%	5.25%	2.2%	0%
Not At All	1	0%	0%	0%	0%	0%	0%	0%	0%	0%

III - D : a

	Overall (N=177)	Large (N=149)	Small (N=28)	Public (N=108)	Private (N=69)	Presidents (N=9)	Deans (N=19)	Chairmen (N=45)	Faculty (N=104)
None	14.4%	14.3%	10.8%	14.%	14%	0%	26%	16%	13%
All	1.2%	1.3%	3.6%	1%	1.4%	11.1%	0%	0%	1%

Programs

Science	42%	4.6%	3.6%	3%	5.6%	11.1%	15.8%	4.4%	2%
Math	0.6%	0.6%	0%	1%	0%	0%	0%	2.2%	0%
Teaching Methods	5.4%	5.8%	0%	4%	7.0%	0%	5.3%	15.4%	1%
Modular Scheduling	0.6%	0%	3.6%	1%	0%	0%	0%	4.4%	0%
Art	1.2%	1.9%	0%	2%	2.8%	0%	0%	8.8%	1%
Philosophy	0.6%	0%	3.6%	1%	0%	0%	0%	2.2%	0%
Language	1.8%	1.9%	0%	3%	0%	0%	0%	2.2%	2%
Literature	1.2%	0.6%	7.2%	1%	1.4%	0%	0%	2.2%	2%
Humanities	2.4%	1.3%	7.2%	2%	2.8%	0%	5.3%	0%	3%
Psychology	1.2%	1.3%	0%	1%	0%	0%	0%	4.4%	0%
Data Processing	0.6%	0.6%	0%	1%	0%	0%	0%	2.2%	0%
Sociology	1.8%	1.3%	0%	0%	4.2%	11.1%	0%	2.2%	0%
Liberal Arts	0.6%	0%	3.6%	0%	1.4%	0%	0%	0%	0%
History	0.6%	0.6%	0%	0%	1.4%	0%	0%	2.2%	0%
Bible	0.6%	0%	3.6%	0%	1.4%	0%	0%	0%	1%

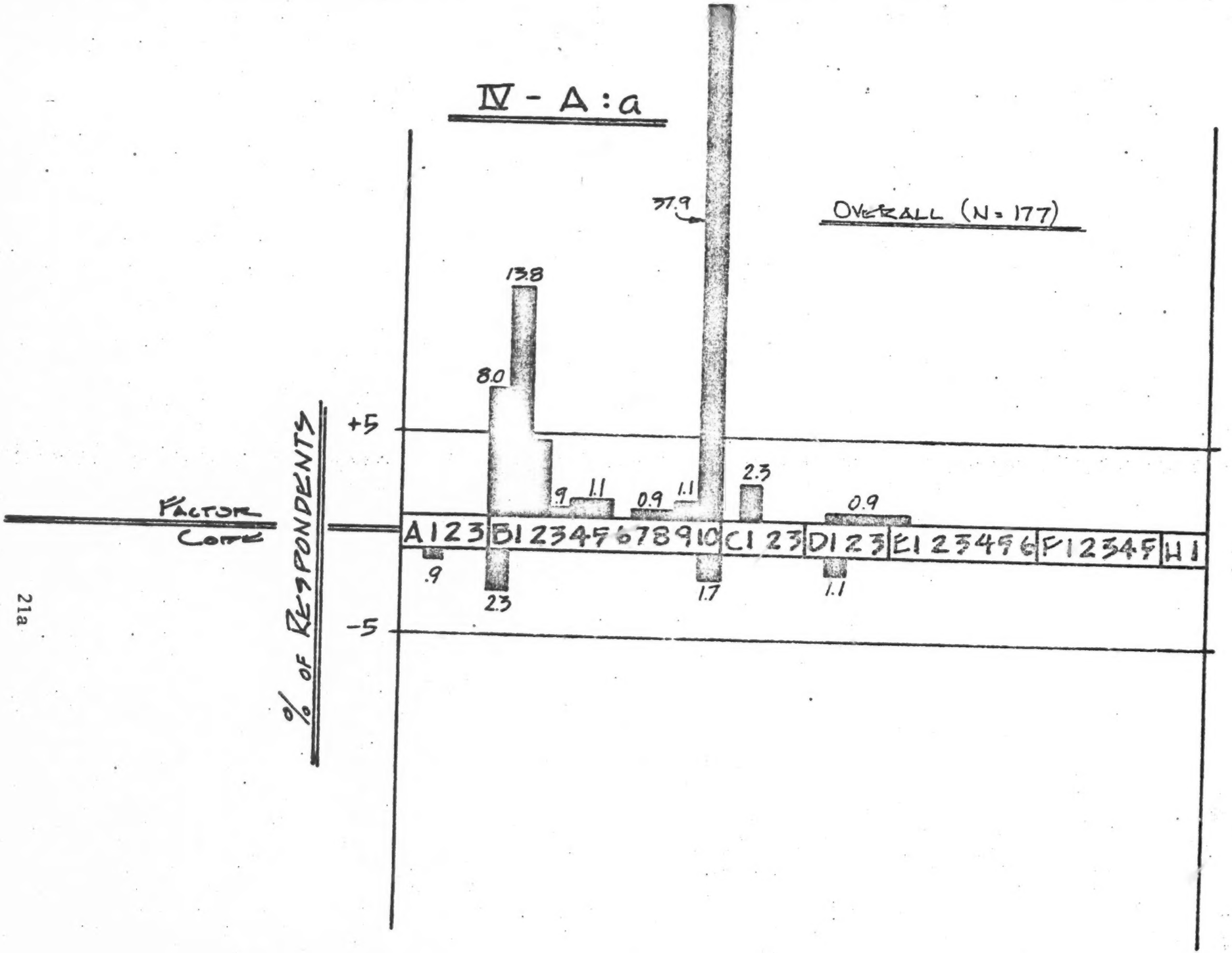
Only two response items appear in the final category of the questionnaire, "Other NETCHE Televised Instruction." The first of these is "A. In what way, if at all, do you feel television can best be utilized as an educational medium in higher education, in your department, in courses you are now teaching?" As seen in Figure IV-A:a there is a very strong selection of the building of academic quality through utilization of the supplementary lessons as the best way to utilize television. In view of the very strong indications of preference for supplementary lessons in this item contrasted to the milder responses of section III which dealt exclusively with the supplementary broadcasts, an interpretation must be assigned to the significantly greater absolute number of respondents to the item here than for section III. Since the previous series of questions focused upon present users while item IV-A asks a judgment of all responders, the inference is that large numbers of non-users now intend to utilize the NETCHE supplements in the future. This pattern of responses by more than a third of the total sample group seems to suggest also that development of the supplementary lessons is the most appropriate area of future development for NETCHE if present conditions continue.

Second only to the supplementary lessons, moreover, is the highly significant response indicating the desire for the expansion of course offerings for higher education by instructional television in Nebraska. The over-all desire for instructional television is clearly channelled in the responses obtained for this item to the improvement of quality in instruction in higher education. Economic and administrative advantages of instructional television have little impact on the assessment of value for the potential development of this medium.

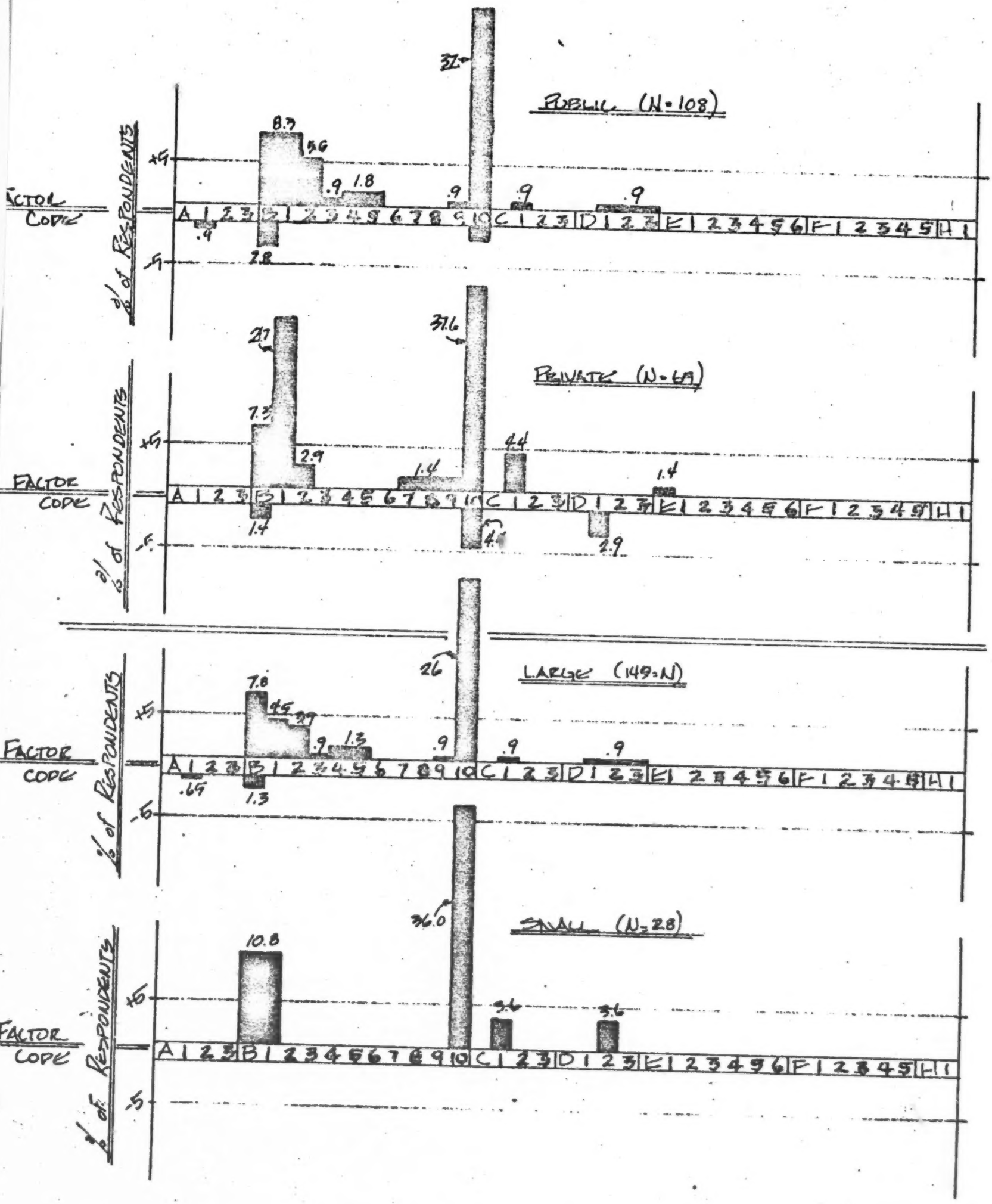
With only minor variations in emphasis, the clarity and definiteness of the over-all sample are repeated in each of the data-breaks (Figures IV-A; b and c).

The final item of the questionnaire asked, "B. To what extent would you be willing to participate personally in utilization and production of televised materials (eg. teach via NETCHE broadcast, use televised courses in your classroom, if available, etc.), or using and/or creating televised materials for higher education?" The respondents indicated a general reluctance to teach via NETCHE broadcast (Figure IV-B:a). In all categories with sufficient absolute numbers to be considered, including the over-all, the percentages reporting neutral or lower on the 5-point scale exceeded those reporting neutral or higher. On willingness to utilize courses, however, the results were almost

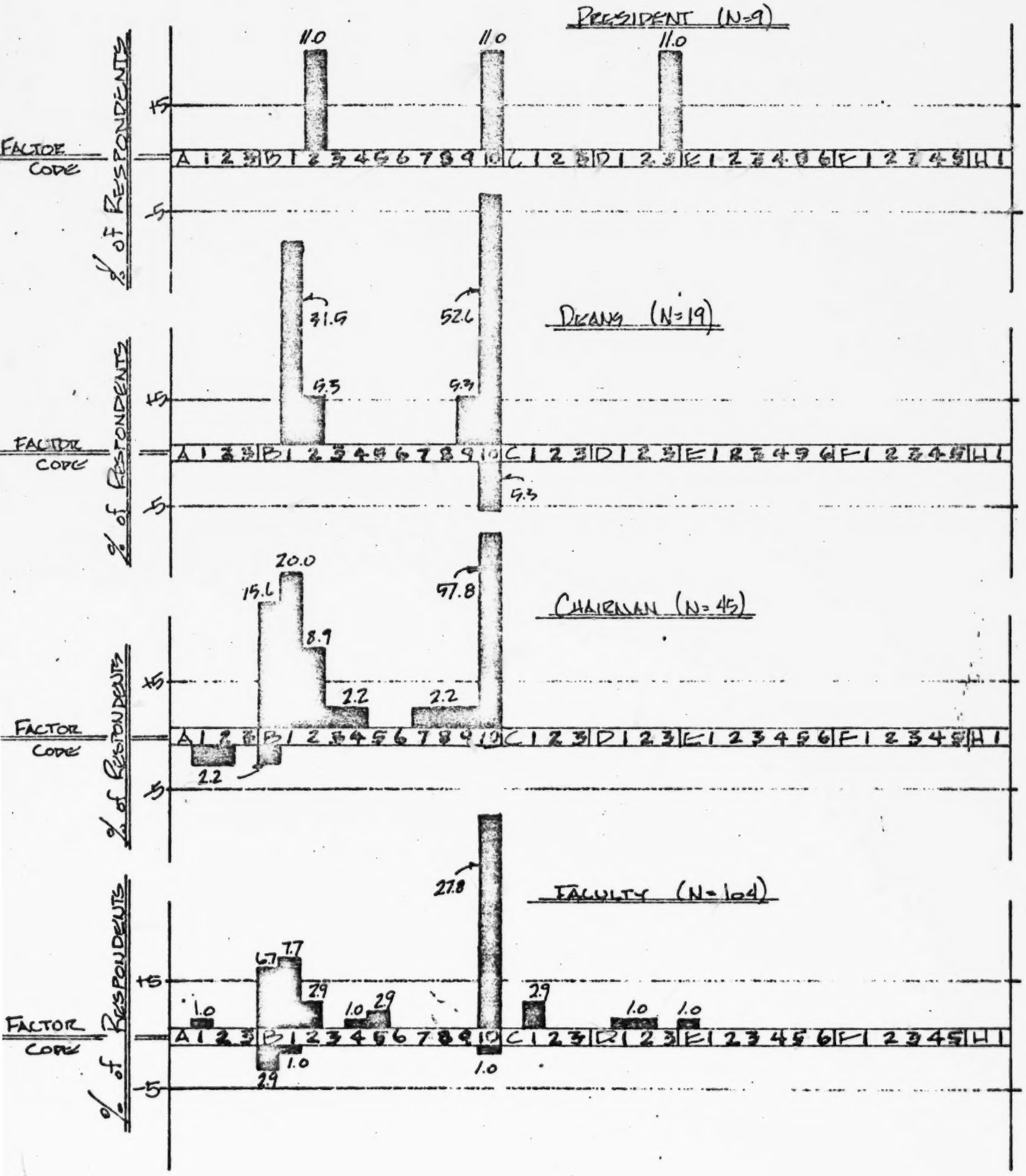
IV - A : a


OVERALL (N = 177)
37.9
13.8
8.0
.9
1.1
0.9
1.1
2.3
0.9
+5
-5
% OF RESPONDENTS
FACTOR CODE
A 1 2 3
B 1 2 3 4 5 6 7 8 9 10
C 1 2 3
D 1 2 3
E 1 2 3 4 5 6
F 1 2 3 4 5
H 1
.9
2.3
1.7
1.1

IV - A : b


PUBLIC (N=108)
% of Respondents
+5
-5
8.7
5.6
.9
1.8
.9
.9
.9
2.8
Factor Code
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
PRIVATE (N=69)
% of Respondents
+5
-5
7.3
2.9
1.4
4.4
1.4
1.4
4.4
2.9
Factor Code
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
LARGE (149=N)
% of Respondents
+5
-5
7.8
4.5
.9
1.3
.9
.9
.9
.64
1.3
Factor Code
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
SMALL (N=28)
% of Respondents
+5
-5
10.8
3.6
3.6
Factor Code
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1

IV - A : c


PRESIDENT (N=9)
11.0
11.0
11.0
% of RESPONDENTS
+5
-5
FACTOR CODE
A 1 2 3 B 1 2 3 4 5 6 7 8 9 10 C 1 2 3 D 1 2 3 E 1 2 3 4 5 6 F 1 2 3 4 5 H 1
DEANS (N=19)
31.6
52.6
5.3
5.3
5.3
CHAIRMAN (N=45)
15.6
20.0
8.9
2.2
2.2
97.8
2.2
FACULTY (N=104)
27.8
6.7
7.7
2.9
1.0
2.9
1.0
2.9
1.0
1.0
1.0
1.0

IV-B:a (PART 1)

WILLINGNESS TO: TEACH

		Overall (N=177)	Large (N=149)	Small (N=28)	Public (N=69)	Private (N=108)	President (N=9)	Deans (N=19)	Chairman (N=45)	Faculty (N=104)
Very Willing	5:	2.4	1.9	3.6	1.8	2.9	11.1	0	2.2	2.0
	4:	9.6	10.4	0	9.2	8.7	0	5.25	2.2	5.0
	3:	6.0	5.9	3.6	7.4	2.9	11.1	0	2.2	8.0
	2:	9.0	8.4	7.2	7.4	10.0	0	0	15.4	8.0
Refuse	1:	7.8	7.8	3.6	7.4	5.8	0	0	4.4	11.0

FIGURES IN %

WILLINGNESS TO: UTILIZE COURSE

		Overall (N=177)	Large (N=149)	Small (N=28)	Public (N=69)	Private (N=108)	President (N=9)	Deans (N=19)	Chairman (N=45)	Faculty (N=104)
Very Willing	5:	3.0	2.6	3.6	2.8	2.9	11.1	0	4.4	2.0
	4:	17.4	18.2	3.6	18.9	13.0	0	10.5	26.4	15.0
	3:	11.4	11.1	7.2	12.0	8.7	0	5.25	15.4	11.0
	2:	4.8	4.5	3.6	3.7	5.8	0	0	8.8	4.0
Refuse	1:	7.2	7.2	3.6	6.5	5.8	0	0	4.4	10.0

FIGURES IN %

IV-B:a (PART-2)

WILLINGNESS TO: UTILIZE SUPPLEMENT

		Overall (N=177)	Large (N=149)	Small (N=28)	Public (N=108)	Private (N=69)	President (N=9)	Deans (N=19)	Chairman (N=45)	Faculty (N=104)
Very Willing	5:	3.6	3.2	3.6	2.8	4.4	11.1	0	4.4	3.0
	4:	15.6	16.3	3.6	17.2	10.0	0	10.5	24.2	13.0
	3:	10.8	11.1	3.6	12.0	7.3	0	0	15.4	11.0
	2:	4.8	4.5	3.6	3.7	5.8	0	0	8.8	4.0
Refuse	1:	6.0	5.9	3.6	4.6	5.8	0	0	4.4	8.0

FIGURES IN %

WILLINGNESS TO: HELP IN PRODUCTION OR CREATION

		Overall (N=177)	Large (N=149)	Small (N=28)	Public (N=108)	Private (N=69)	President (N=9)	Deans (N=19)	Chairman (N=45)	Faculty (N=104)
Very Willing	5:	1.2	1.3	0	0.9	1.4	0	0	0	0
	4:	6.0	5.2	7.2	3.7	8.7	0	10.5	4.4	2.0
	3:	3.0	3.2	0	4.6	1.4	0	0	4.4	3.0
	2:	0	0	0	0	0	0	0	0	0
Refuse	1:	1.2	1.3	0	1.8	0	0	0	0	2.0

FIGURES IN %

directly reversed: except for the small-schools category which balanced around the neutral point, all categories showed an excess of neutral or above compared with neutral or below. This same pattern evolved for willingness to utilize the supplements and, with two exceptions, for willingness to help in production or creation of the broadcast materials. The two exceptions were the total absence of any response to this item by the presidents and the somewhat negative response by the faculty members who responded to this item.

A special point of analysis was made for respondents to this item (IV-B) whose primary interests lay in those fields in which NETCHE was currently broadcasting courses: economics, mathematics, psychology, and aesthetics. Again, as in the overall generalization concerning willingness to teach, the results were more negative than neutral (Figure IV-B:b). With the exception of the economists, this group of respondents indicated a general willingness to utilize broadcast courses.

IV-B:b (PART I)

WILLINGNESS TO: TEACH

		OVERALL N=89	ECONOMICS N=22	MATH-SCIENCE N=27	PSYCHOLOGY N=10	AESTHETICS N=30
VERY WILLING	5:	3.3%	4.5%	0.0%	10.0%	3.3%
	4:	7.7%	4.5%	7.4%	No %	13.2%
	3:	8.8%	13.5%	14.8%	No %	3.3%
	2:	11.0%	4.5%	14.8%	No %	16.6%
REFUSE	1:	11.0%	18.0%	14.8%	No %	6.6%

WILLINGNESS TO: UTILIZE COURSE

		OVERALL N=89	ECONOMICS N=22	MATH-SCIENCE N=27	PSYCHOLOGY N=10	AESTHETICS N=30
VERY WILLING	5:	3.3%	4.5%	No %	10.0%	3.3%
	4:	17.6%	9.0%	18.5%	10.0%	29.7%
	3:	13.2%	18.0%	18.5%	No %	13.2%
	2:	5.5%	9.0%	3.7%	No %	6.6%
REFUSE	1:	9.9%	22.5%	8.1%	No %	6.6%

NOTE: DONE FOR RESPONDENTS WHOSE INTERESTS LIE IN ECONOMICS, PSYCHOLOGY AESTHETICS, OR MATH-SCEINCE.

IV-B:b (PART 2)

WILLINGNESS TO: USE SUPPLEMENT

	OVERALL N=89	ECONOMICS N=22	MATH-SCIENCE N=27	PSYCHOLOGY N=10	AESTHETICS N=30
VERY WILLING 5:	4.4%	4.5%	3.7%	10.0%	3.3%
4:	15.4%	9.0%	8.1%	10.0%	29.7%
3:	9.9%	18.0%	18.5%	No%	13.2%
2:	5.5%	9.0%	3.7%	No%	6.6%
REFUSE 1:	8.8%	18.0%	8.1%	No%	3.3%

WILLINGNESS TO: HELP IN PRODUCTION OR CREATION

	OVERALL N=89	ECONOMICS N=22	MATH-SCIENCE N=27	PSYCHOLOGY N=10	AESTHETICS N=30
VERY WILLING 5:	2.2%	4.5%	No%	10.0%	No%
4:	4.4%	No%	7.4%	10.0%	6.6%
3:	3.3%	4.5%	3.7%	No%	3.3%
2:	No%	No%	No%	No%	No%
REFUSE 1:	1.1%	No%	3.7%	No%	No%

NOTE: DONE FOR RESPONDENTS WHOSE INTERESTS LIE IN ECONOMICS, PSYCHOLOGY, AESTHETICS, AND MATH-SCIENCE.

CONCLUSIONS

There are two inferences which can be drawn readily because of the consistency with which they are supported throughout the responses: 1) Instructional television's major value to colleges in the sample group is its capacity to improve the quality of instruction available to the students; and 2) the most valued means by which ITV contributes to instructional quality is through the broadcasting of supplementary instruction for occasional use in many established courses taught on the campuses. One other conclusion notable for its clarity is the importance of the newsletter as a source of information although many other channels of information were potentially available to the respondents.

Although this study revealed no basis for judgment on a sequence of parameters, it does present evidence that those who feel they are involved in the decision-making process are more likely to utilize the materials, and that those who are uninvolved are disinterested. Because of the variety of opportunities to become involved, however, it is equally likely that the lack of interest leads to non-involvement.

There were rather clear contrasts between the responses of the presidents and those of teaching faculty, but deans of instruction and the identified department chairmen tended to respond independently of identifiable patterns. If there was any distinction -- and it was not consistent -- the deans were inclined to respond somewhat more frequently as the presidents and the chairmen more frequently as the faculty. One contrast occurred by academic position which showed the presidents, deans, chairmen, and faculty -- in that order -- interested in experimenting with instructional television; but the faculty, chairmen, deans, and presidents -- again in that rank order -- seeing instructional television as a relief to enrollment pressures.

There were several indications that although each of the data-break categories (particularly large/small and public/private in this analysis) was independent, the small-private and large-public combinations tended to be bipolar. The large-public institutions of higher education were more concerned with enrollment pressures while the small-private colleges evidenced more concern for consistency of ITV utilization with the educational philosophies of their institutions, for example. Faculty and administrative members of the small-private colleges seemed to be more familiar with NETCHE courses and to feel more involved with the organization than respondents from the large-public institutions.

Especially in the small-private schools a shift of attitude toward instructional television was apparent, with the largest percentage of opinion shift being by the presidents, next by the deans, then by chairmen, but none by faculty respondents. The shift was a negative one, apparently expressing the belief that the improvement in instructional quality resulting from televised courses was less than anticipated; but, on the same criterion, there was a more favorable attitude developing toward the value of the supplementary lessons.

With specific reference to the 5 questions posed at the beginning of the study (see page 6 , supra), these are the indications drawn from the sample responding to this questionnaire investigation:

1. The perceived values of sharing instruction by television are, most notably, its capacity for improving the quality of instruction available in the classrooms of the responding institutions and, secondly, its ability to relieve some of the pressures of rapidly expanding enrollments.

2. Occasional lessons to supplement on-campus instruction seem to generate the most enthusiasm among respondents. Where full courses by broadcast television are considered, they too are favored; but spontaneous reference to the complete courses is considerably less frequent than reference to the supplementary lessons.

3. There are differences of attitudes toward instructional television among presidents, deans of instruction, chairmen of departments which offer courses also available by television, and faculty members. The differences in attitude may be attendant upon differences in involvement, however, since the presidents and deans express more involvement than chairmen and faculty members. Presidents and faculty members appear to have bipolar responses on many test items, but there is no general continuum of attitudes according to academic position in the four categories.

4. The decision-making processes which determine whether or not televised instruction will be used did not emerge clearly from the data. It is evident, however, that in the over-all response and in nearly all data-breaks there appears to be a commitment to the

values of ITV for future application, and a willingness to use both the supplements and the complete courses. Respondents who were best informed about NETCHE appeared to be the most involved in its decision-making processes, and the presidents and deans were revealed as the best informed sub-groups. Decisions concerning utilizations were reportedly influenced by the administration although the presidents report being influenced by the faculty. All academic groups report involvement in the decision making process, but it is also revealed that there is more general involvement in the decision-making processes concerning ITV utilizations by respondents in the small-private colleges than those from large-public schools. It would appear that faculty and administration mutually influence each other, and that utilization decisions are deliberative and cooperative but following no clearly defined pattern which can be generalized from the data collected in this study.

5. It does seem that a sense of involvement in planning instructional television affects the readiness to use the televised product.

In summary, television's most valuable contribution to higher education as perceived by the respondents of 26 institutions located in Nebraska is its potential for improving instructional quality. The particular value of supplementary lessons available on special topics or by noted instructors for many different college and university courses is consistently expressed, but without any diminution of the importance of the offering of complete courses although these serve fewer instructors during any given term. A newsletter distributed to faculty members of the 26 colleges and universities was the most effective of the channels of communication concerning instructional programing presented via the Nebraska educational television network by the Nebraska Educational Television Council for Higher Education, Incorporated. From information grows involvement, from involvement grow decisions.

For the future, among all academic positions, all sizes of institutions, and regardless of the form of institutional support, there is strong support first for the supplementary lessons by television, second for the complete course offerings by television. The apparent desire for continuity of this form of instructional presentation was both strong and pervasive. It suggests that a desire and a need for the continuation of NETCHE is the broadest common ground revealed by this study.

APPENDIX A

"NETCHE" is the Nebraska Educational Television Council for Higher Education, Inc. -- an organization formed by the presidents of all institutions of higher education in Nebraska for providing and utilizing instruction made available by television, employing the State's ETV network. Several courses are offered in addition to "supplementary" materials designed to support local classroom instruction in various disciplines and subjects.

Please answer all of the following questions using as much, or as little, space necessary to give an accurate report. If you feel that any questions are not applicable to you, please explain why. Please reply on separate page.

INSTRUCTIONAL TELEVISION, GENERAL

A. If you have considered television as an educational medium for use in your institution or department, what situation (or situations) caused you to do so?

B. Was the decision concerning utilization influenced by the support or opposition of administration, faculty, students, board, parents or others? How important do you feel this influence was?

C. What do you estimate to be the present attitude towards the utilization of instruction television of your administration, of your faculty, of your students? What do you feel are the major reasons for their opinions?

TELEVISED COURSES offered by NETCHE

If your considerations below apply to specific courses only, please identify them.

A. The following courses are being offered by NETCHE during the fall semester 1967-1968: Aesthetics, Macro-Economics, Concepts of Modern Mathematics, and General Psychology. What factors influenced the decision of your institution, administration, or department to utilize (or not to utilize) them?

B. To what extent do the considerations involved in the decision to use (or not to use) televised courses during the fall semester 1967-1968 still apply? In what ways, if any, have they changed?

C. If you are now using any televised course, what special arrangements have been necessary (please be as specific as possible, eg. *scheduling, equipment, catalog changes, etc.)?*

D. To what extent did you personally participate in the deliberations concerning use of televised courses?

TELEVISED "SUPPLEMENTARY" INSTRUCTION

A. In what way, if at all, are you presently utilizing (or planning to use) the programs of supplementary instruction provided twice a week by NETCHE? Please discuss specifics, including *programs used and viewing facilities provided.*

B. From what sources did information and or discussion arise influencing your use (or non-use) of NETCHE supplementary instructional broadcasts?

C. Do you feel that the plan to offer two programs of supplementary instruction per week throughout the academic year 1967 - 1968 is appropriate? Why or why not? To what extent do you believe your membership and participation in NETCHE is justified by these broadcasts.

D. What particular units of supplementary instruction provided by NETCHE are of benefit to you?

OTHER NETCHE TELEVISED INSTRUCTION

A. In what way, if at all, do you feel television can best be utilized as an educational medium in higher education, in your department, in courses you are now teaching?

B. To what extent would you be willing to participate personally in utilization and production of televised materials (eg. teach via NETCHE broadcast, use televised courses in your classroom, if available, etc.), or using and/or creating televised materials for higher education?

APPENDIX B

FACTOR CODING

A. Enrollment pressure

1. Number of students to be served
2. Staff requirements for traditional instruction
3. Availability of capable instructors
4. Other

B. Quality concerns

1. Variety of course offerings
2. Instructional competence
3. Course organization
4. Faculty time availability for research, counselling, etc.
5. Community service
6. Public relations
7. Maintenance of academic control; e.g., pace, content
8. Consistency with philosophy of education
9. Preview and editing potential
10. Supplementation of existing instruction
11. Other

C. Economic values

1. Availability of electronic equipment required
2. Appropriateness of available space
3. Capital and operating costs
4. Other

D. Administrative involvements

1. Scheduling utilizations
2. Coordination time requirements
3. Commitments for course offerings
4. Other

E. Experimental orientation

1. Attitudes from previous experiences with instructional television
2. ITV results known from the literature
3. Availability of supporting instructional materials
4. Ease of implementation
5. Equipment applications
6. Need for observation before making judgments
7. Other

F. Interactional effects

1. Pressure from other academic levels
2. Non-faculty pressures
3. Lines of responsibility
4. Social and personal prestige
5. Evidence of apathy
6. Other

G. Other categories

H. Response to NETCHE as an organization

1. Awareness of existence
2. Other

APPENDIX C

COVER LETTER

Lincoln, Nebraska
January 31, 1968

You may recall earlier announcements that a Federal project is providing funds to investigate utilization of college level televised instructional programs in Nebraska. The Nebraska Educational Television Council for Higher Education, Inc. (NETCHE), is now asking for your assistance in gathering the data for this investigation.

Will you please take time, personally (since other staff members at your institution will also be surveyed), to complete the attached questionnaire? I know your time is limited, but the more thoroughly you can supply detailed information the more likely is NETCHE's future service to fulfill the needs of all its member colleges.

Replies will, of course, be confidential. The questionnaire will be analyzed by a research assistant and a report prepared without revelation of specific responses or separate institutions.

Your help will be greatly appreciated. May we have the requested data within about 10 days; please return your data in the enclosed envelope.

Sincerely,

M. Scheffel Pierce
Research Project Director

SUMMARY

During the 20 years of instructional television in higher education there has been much anticipation of a great impact of this new medium on methods of instruction. During the past decade, especially, the ability of television to present instruction with effectiveness equal to other forms of presentation has been well established, and its capability for communicating certain types of visual information has been accepted. But television as an instructional medium in higher education has never "caught on" as expected: good materials presented by TV have not been used by the classroom instructors in many instances when the instructors have had the freedom to choose between TV and other modes of presentation.

What are the attitudes which lead to choices to use or not to use ITV, and how do these attitudes influence choices? Are the attitudes of presidents or deans or department chairmen different from those of the faculty members? Perhaps the investigation of these parameters will reveal some of the sources of decisions affecting utilization of TV in college-level instruction. There may also be identifiable attitude factors associated with the type of institution - public or private, large or small - which affect the acceptance of ITV. The investigation of several possible sources of attitudes among faculties and administrators of higher education as they consider integration of instructional television into their academic programs may reveal either the strengths and weaknesses of ITV as it is now presented, or it may demonstrate that there are certain specific obstacles to be overcome in order to gain acceptance of an effective instructional medium.

These, then, are the questions which have led to the present study which is an effort to answer the question, "What are the factors which influence the choice between acceptance and rejection of available instruction among the academic decision makers in institutions of higher education?"

The investigation involved a questionnaire study analysed by factor coding of the responses. The sample group was the faculty and administration of 26 colleges and universities in Nebraska - all institutions of higher education in the State - which formed the membership of the NEbraska Educational Television Council for Higher Education, Incorporated. Through Statewide ETV, NETCHE made available a series of courses of instruction and a variety of individual supplementary lessons for the full breadth of the curricula. The presidents of the institutions formed the organizations, the deans of instruction

detailed the development of projects, and chairmen and faculty members were involved in selection of the TV instructor and the definition of the course objectives. Seemingly, all academic levels at least had an opportunity to become involved in pre-planning.

From replies to the questionnaire, the following conclusions were drawn:

1. The generally recognized values of ITV are its abilities to improve available classroom instruction and relieve certain pressures of large enrollments.

2. Both complete courses of instruction and the occasional "supplementary" televised lessons are favored, but there appears to be some preference in toto for the single lessons.

3. Involvement seems to be more directly related to attitudes than academic position is, although there are observable dichotomies between the presidents and the faculty members.

4. Despite the relatively low utilization at present, there seems to be present an anticipation for future use of ITV.

5. A sense of involvement evidently is the most important single factor in decisions to use or not use ITV when it is developed for in-class applications.

The broadest general conclusion is that ITV will continue to be applied to the improvement of instruction in higher education, apparently with a gradual rise in acceptance by all academic levels in all kinds of institutions.